

A detailed, high-magnification microscopic image of numerous red blood cells. The cells are biconcave discs, appearing as bright red, textured spheres with a central indentation. They are densely packed and overlap, creating a sense of depth and movement. The lighting highlights the surface texture and the concave shape of the cells.

**SONY**  
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# Medical Catalogue 2011/12

Redefining clarity

[www.pro.sony.eu/medical](http://www.pro.sony.eu/medical)



# Redefining clarity

Sony Medical is focused on enabling clinicians achieve a clearer view of the human body. We are redefining clarity – with innovations including the first OLED medical monitor and 3D line-up. We continue to support the advancement of diagnosis and patient care.

Our dedicated marketing, product planning and engineering teams meet regularly with medical doctors and other healthcare professionals. This regular dialogue feeds crucial customer insights into all stages of our product development, enabling us to continually refine our expertise and deliver innovative solutions.

From the world's first OLED medical monitor to our leading 3D medical monitor, camera and recorder line-up, Sony Medical brings you a comprehensive range of standard-setting equipment.

As well as helping to shape modern surgical practice, we also remain committed to supporting cost-efficient workflows with the delivery of networks for storing, sharing and distributing digital data.

Over the years, Sony have been at the forefront of printing innovation. With this extensive heritage, we have continued to develop medical printers that fulfill the needs and requirements of the healthcare industry.

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# Cameras – capturing clarity

## Application-specific SD & HD medical cameras

Continuing to challenge the boundaries of medical imaging technology, we enable clinicians to capture the most precise digital images with our range of medical cameras.

Ensuring the most intricate details are captured with the clearest precision, our range extends from SD to HD video cameras. We provide application-specific solutions that capture clarity across fields as diverse and demanding as ophthalmology, neurosurgery, pathology, biomedical research and veterinary science.



### PMW-10MD

1/2 inch 3CMOS HD Colour Video Camera



#### Suitable for: Surgical Microscopy

Unrivalled HD performance, groundbreaking technology and its 2-piece design combine to make the PMW-10MD the ideal solution for ultimate image quality in microscopic applications.

- > High sensitivity delivers detail in low light environments
- > Small, lightweight C-mount camera head for easy integration
- > On-board HD recording capability

#### Features

- > Incorporates 3-chip 1/2-inch type Exmor Full HD CMOS sensor
- > DVI-D and HD-SDI outputs
- > Two SxS Memory card slots



#### Product compliance

EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A

### DXC-C33P

1/3 inch 3CCD Colour Video Camera



#### Suitable for: Surgical Microscopy

The 2-piece compact design makes this model a perfect fit for space-limited applications, whilst offering great picture resolution and many useful features.

- > Ultra-small 3CCD remote camera head
- > High resolution
- > DV connection to compatible VTR

#### Features

- > Incorporates one of the smallest/lightest camera head units
- > High horizontal resolution of 800 TV lines
- > DV output allows image recording into i.LINK interface-equipped VTR with no deterioration



Lens shown is optional

#### Product compliance

EN 60601-1, EN 60601-1-2



DXC-390P	1/3 inch 3CCD Colour Video Camera
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**Suitable for: Microscopy, Observation**  
Feature-rich and using a C-mount lens, this ExwaveHAD™ camera is ideal where picture accuracy and detail are essential.

- > High picture quality
- > Wide choice of available lenses from various manufacturers
- > Small and lightweight

**Features**

- > ExwaveHAD™ technology provides excellent sensitivity and low smear levels
- > High horizontal resolution of 800 TV lines
- > Complies with the MDD when used with optional CMA-D2MD AC power supply

 Lens shown is optional	<b>Product compliance</b> EN 60601-1, EN 60601-1-2
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DXC-990P	1/2 inch 3CCD Colour Video Camera
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**Suitable for: Microscopy, Observation**  
With so many functions, the DXC-990P is the perfect choice for a variety of applications. It incorporates ExwaveHAD™ technology which greatly improves camera sensitivity and reduces smear.

- > Superior picture quality
- > Advanced digital signal processing

**Features**

- > ExwaveHAD™ technology provides excellent sensitivity and low smear levels
- > High horizontal resolution of 850 TV lines
- > Complies with the MDD when used with optional CMA-D2MD/CE AC power supply

 Lens shown is optional	<b>Product compliance</b> EN 60601-1, EN 60601-1-2
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# Recorders – lasting clarity

Versatile, workflow-efficient recording and storage solutions

Applying our deep expertise across recording, storage and network technology, our solutions ensure clinicians can rely on the clarity of their medical images for years to come.

The Sony Medical range of compact and versatile solutions deliver exceptional archive picture quality. They support workflow efficiency with powerful random access capability, plus enhanced security that protect patient data.



DVO-1000MD

Medical DVD Recorder



**Suitable for: Ultrasound, Endoscopy, Radiology, Surgery**  
This DVD recorder has been designed specifically for use in a wide range of surgical and other healthcare environments. Compact, rugged and easy to use, it offers all the benefits of removable disc media.

- > DVD+RW Digital Recording
- > Easy to use operation

- Features**
- > Rewritable DVD+RW disc as recording media (highly re-usable, low-cost and wide interoperability)
  - > High quality MPEG2 video recording (HQ/SP/LP mode available)
  - > Quick recording and high reliability with back-up hard disk recording
  - > RS-232C and USB remote control
  - > Compact size & lightweight



**Product compliance**  
EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class B

BZMD-1000\*

DICOM Capture Station



**Suitable for: Endoscopy, Ultrasound, Radiology, Surgery**  
The BZMD-1000 is the solution for HD still/video acquisition and DICOM file creation. With built-in touch-screen operation, capturing complex procedures, for medical records or education, is made simple.

- > All-in-one solution for multi-format procedure recording
- > Wide-ranging compatibility of inputs and outputs
- > DICOM MPEG2 compliant

- Features**
- > Records HD and SD video
  - > Connects to DICOM and non-DICOM networks
  - > Built-in DVD/Blu-ray Disc™ writer

\* This product has been exclusively manufactured for Sony by Kontron.



**Product compliance**  
EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class B

HVO-1000MD

HD Video Recorder



To make efficient use of the operating theatre and to drastically improve the way doctors use surgery images, the HVO-1000MD offers many recording advantages and makes a significant contribution to effective hospital data management.

- > High quality HD recording
- > Simultaneous recording on internal hard drive, DVD/Blu-ray Disc™ drive and USB slot
- > Easy to use operation

- Features**
- > Real-time distribution with a streaming function
  - > Broad Support of media for data exchange
  - > High quality HD recording (MPEG-4 AVC/H.264 compression)
  - > Large capacity hard disc for long recording capability
  - > Wide range of Interfaces
  - > Network data transmission through FTP or CIFS
  - > Pre-install Sony USB printer driver
  - > Still and motion image capture



**Product compliance**  
EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class B

Vegas Pro 10.0

Professional Video Editing Software

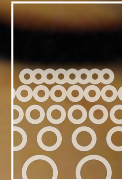


**Suitable for: Ultrasound, Endoscopy, Urology, Radiology**  
The Vegas™ Pro 10 collection offers an efficient and intuitive environment for professional video and broadcast production, as well as DVD and Blu-ray Disc™ authoring.

- > Precise editing tools
- > Superior audio control
- > Powerful Blu-ray Disc™ authoring

- Features**
- > Device explorer window
  - > Improved interface and 3D editing functions
  - > Vegas Pro 10 supports projects up to 4096 pixels by 4096 pixels
  - > Enhanced window trimmer
  - > Choice of layout
  - > Pre-built templates





# Monitors – clarity that displays every detail

Medical monitors that ensure superior image quality

Superior image quality is not a luxury, it is a clinical necessity for informing critical decisions. For surgeons about to make an incision, the ability to distinguish clearly between different tissue types is paramount.

Having pioneered the development of LCD technology that delivers outstanding picture quality, we have also created an extensive range of dedicated medical HD and SD LCD monitors. Providing a choice of resolutions and screen sizes from 15 to 32 inch, these lightweight monitors have been specifically designed for medical environments. Delivering still and moving images with excellent image contrast plus stable and accurate colour reproduction, they give clinicians the detailed clarity and pinpoint precision they need.

## LMD-1530MD

### 15 inch Medical LCD Monitor



**Suitable for: Microscopy, Endoscopy**  
This high resolution LCD monitor with superb picture quality and DC power supply is ideal for Surgery Arm Mount applications.

- > Full range of SD inputs & HDMI
- > IPS LCD panel with WXGA (1280x768) resolution
- > Wide viewing angle

#### Features

- > Anti-reflection (AR) coated protection panel
- > VESA mounting standard compliance
- > Key inhibit function
- > Parallel control interface
- > Vesa mounting compatibility



**Product compliance**  
EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A

## LMD-1951MD

### 19 inch Medical LCD Monitor



**Suitable for: Microscopy, Endoscopy**  
This high resolution LCD monitor with superb picture quality and DC power supply is ideal for Surgery Arm Mount applications.

- > LED backlight for high contrast and brightness
- > Power via AC adaptor or direct DC in
- > 10 bit signal processing for enhanced picture quality

#### Features

- > Panel Resolution SXGA (1280x1024 pixels)
- > Accepts signals ranging from SD to HD video, analogue VGA to SXGA PC input, as well as DVI-D input
- > 5 types of optional input adaptors are offered for use in two rear slots
- > Parallel and serial remote control ports as standard
- > User Memory provides the capability of saving 20 patterns of memory settings
- > VESA mounting standard



**Product compliance**  
EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A

## LMD-2110MD

### 21 inch Full HD Medical Monitor



**Suitable for: Microscopy, Endoscopy**  
Offering superb picture quality, the feature-rich LMD-2110MD is ideal for video endoscope cart installation.

- > Versatile Video and PC inputs ranging from SD to HD
- > X-Algorithm for best moving picture quality
- > Improved picture stability when exposed to high electromagnetic fields in medical environments, i.e. electrical knife

#### Features

- > Resolution 1920 x 1080 pixels
- > Accepts signals ranging from SD to HD video, analogue VGA to SXGA PC input, as well as HDMI input
- > HD-SDI can be accepted by additional adaptor
- > Parallel and serial remote control ports as standard
- > User Memory provides the capability of saving 20 patterns of memory settings
- > VESA mounting standard



**Product compliance**  
EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A

LMD-2451MD

24 inch Medical Full HD LCD Monitor



The innovative LMD-2451MD has Advanced Image Processing Technology and enables physicians to see still and moving images with accurate, HD clarity and-pinpoint precision.

- > Exceptional HD monitor with class-leading resolution
- > Original ChromaTRU colour processing technology
- > Superb quality WUXGA panel
- > DVI loopthrough possible with BKM-256DD board

- Features
- > Resolution 1920 x 1200 pixels
  - > Accepts almost any signal from SD to HD video
  - > Complies with the 100mm VESA mounting standard
  - > Multi-input capability (HD and SD signals from both analogue and digital sources)
  - > Selectable Gamma curves
  - > Key inhibit function



Product compliance  
EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A

PVM-2551MD

Medical OLED Monitor



The Sony PVM-2551MD is the first medical monitor with OLED technology and displays images in outstanding brilliance with in-depth detail.

- > Wide dynamic range – accurate colour reproduction in dark areas of the displayed image
- > Quick response – virtually no motion blur
- > Wide colour gamut – reproduces small differences in colour

- Features
- > 1920 x 1080 Full HD resolution
  - > Variety of scan and display modes
  - > Variety of Gamma curve settings
  - > Noise filter
  - > Direct input selection
  - > Key inhibit function
  - > Easy-clean flat-surface panel
  - > Round shaped bezel
  - > Installation-friendly cabling
  - > VESA mounting compatibility



Product compliance  
EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A

LMD-3250MD

32 inch Medical Full HD LCD Monitor



Utilising the latest fast-responding LCD panels, these monitors offer pictures with high brightness and contrast and a wide (178°) viewing angle.

- > 32 inch Full HD (1920 x 1080) 10-bit LCD panel
- > Original ChromaTRU colour processing technology
- > Multi-input capability (HD and SD signals from both analogue and digital sources)

- Features
- > 10 bit signal processing for enhanced picture quality
  - > 2 Gamma curves: DICOM or CRT 2.2
  - > Multi-display modes, including Picture-out-Picture and Side-by-Side split screen
  - > Mirror image function
  - > User Memory: up to 20 different custom picture settings
  - > Easy-clean smooth surface and fluid-resistant structure



Product compliance  
EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A

# LCD public displays for general purpose

Combining extensive expertise across professional display technology with advances in LCD panel performance and leading HD image resolution, our public display screens provide the optimum combination of high-performance picture clarity and stylish presentation.

Delivering Full HD quality with high brightness, the screens feature DICOM

Gamma mode, ensuring they can be used for a range of applications within medical environments. They bring superb quality to telemedicine and distance learning, as well as radiology second viewings.

The screens are also ideal for digital signage applications, such as reception/waiting area information and entertainment messaging. The sleek, slim

bezel design, rear control buttons and invisible speakers provide high-impact stand-out in any setting. Added to which, the displays provide the flexibility and durability to meet the requirements of system integrators with a range of inputs (RGB, DVI, HDMI, HD-SDI/SDI) plus monitor control and streaming receiver.

FWD-S47H1

47 inch Full HD LCD Public Display



**Suitable for Second Viewing Radiology, Training Rooms, Telemedicine, Distance Learning**  
Sony slim-bezel professional public displays provide brilliant and dynamic messaging in Full HD.

- > 1080 Full HD – high resolution of 1920 x 1080
- > High brightness – allowing for use in bright light conditions
- > DICOM Gamma – for picture viewing in medical applications
- > Wall mountable

- Features
- > High-performance Scalar
  - > HDMI (optional), DVI/HDCP, HD-SDI (optional) inputs
  - > RS-232C and Control S (optional)
  - > Network Port
  - > Option Slot
  - > Picture-in-Picture
  - > Picture-and-Picture
  - > On/Off Timer
  - > Conference Mode

Product compliance  
LVD, EMC, UL 60950-1, CSA C22.2 No. 60950-1, FCC / IC Class B

FWD-S42H1

42 inch Full HD LCD Public Display



**Suitable for Second Viewing Radiology, Training Rooms, Telemedicine, Distance Learning**  
Sony slim-bezel professional public displays provide brilliant and dynamic messaging in Full HD.

- > 1080 Full HD – high resolution of 1920 x 1080
- > High brightness – allowing for use in bright light conditions
- > DICOM Gamma – for picture viewing of radiology images in referral/reference quality
- > Wall mountable

- Features
- > High-performance scalar
  - > HDMI (optional), DVI/HDCP, HD-SDI (optional) inputs
  - > RS-232C and Control S (optional)
  - > Network port
  - > Option slot
  - > Picture-in-Picture
  - > Picture-and-Picture
  - > On/Off timer
  - > Conference mode

Product compliance  
LVD, EMC, UL 60950-1, CSA C22.2 No. 60950-1, FCC / IC Class B





# Printers – printing clarity

## Dedicated medical printers for every application

Designed to ensure the best quality permanent record of photographs, scans and other captured images, our range of dedicated medical printers provides the optimum solution for every application.

Sony printing technology provides superb colour reproduction and exceptional resistance to fading, supporting accurate and consistent diagnosis. Our diagnostic printers offer DICOM-compliant network

capability to give immediate access to various modalities and archive systems across hospitals or an entire region.

With future-proof quality, consistency, reliability and speed assuring years of trouble-free use in a wide range of medical environments, Sony Medical printers and diagnostic imagers ensure visual records that are as clear and precise as they are permanent.

### UP-DR80MD

#### Digital Colour Printer



**Suitable for: Ultrasound, Endoscopy, Microsurgery, Microscopy, Ophthalmology, Pathology**  
Compact and stylish A4 dye-sublimation colour printer with easy to use front operation.

- > A4 colour
- > USB 2.0 interface
- > Superior self-laminating roll media

#### Features

- > Photo-realistic quality prints with Sony dye sublimation printing technology offering optimal protection against fading, finger prints and water-based liquids
- > Compact design for trolley applications
- > A4 size colour print in approximately 76 seconds
- > Advanced grey balance and colour balance adjustment



Print Media:  
**UPC-R80MD**

**Product compliance**  
EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A

### UP-D25MD

#### Digital Colour Printer



**Suitable for: Endoscopy, Microsurgery, Microscopy, Pathology, Ophthalmology, Ultrasound**  
Compact and lightweight in design, the front LCD display enables easy operation and colour adjustment and is ideal for use in a wide range of medical applications.

- > A6 colour
- > USB 2.0 interface
- > Compact size

#### Features

- > Photo-realistic quality prints with Sony dye sublimation printing technology
- > Resolution of 423 dpi for high picture quality
- > A6 size colour print in approximately 19 seconds
- > Supports both self-laminating UPC-24 SA/LA and non-laminating UPC-21 S/L media
- > Advanced grey balance and HSV-colour balance adjustment, including preview window in driver



Print Media:  
**UPC-21S    UPC-21L    UPC-24SA    UPC-24LA**

**Product compliance**  
EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A

### UP-25MD

#### Colour Video Printer



**Suitable for: Endoscopy, Microsurgery, Microscopy, Pathology, Ultrasound**  
Compact and lightweight in design, the front LCD display enables easy operation and colour adjustment and is ideal for use in a wide range of medical applications.

- > A6 colour
- > RGB, Video & S-Video Interface
- > Compact size

#### Features

- > HDTV (HD television) signal support accepting both 1080i and 720p signal types
- > Photo-realistic quality prints with Sony dye sublimation printing technology
- > Resolution of 423 dpi for high picture quality
- > A6 size colour print in approximately 19 seconds
- > Supports both self-laminating UPC-24 SA/LA and non-laminating UPC-21 S/L media
- > RGB and advanced HSV-colour balance adjustment features



Print Media:  
**UPC-21S    UPC-21L    UPC-24SA    UPC-24LA**

**Product compliance**  
EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A





UP-D55

Digital Colour Printer



Suitable for: Endoscopy, Microsurgery, Microscopy, Pathology, Ophthalmology, Ultrasound

The optimum choice for many medical applications ideal for a wide range of scientific, industrial and engineering uses, the UP-D55 provides working efficiency for high-performance printing.

- > A5 colour
- > USB 2.0 interface
- > Ultra compact

Features

- > Dye sublimation printing for superb print quality at 379 dpi resolution
- > A5 size colour prints provided in approx. 20 seconds
- > Compact size enabling it to fit into limited space

	Print Media:	Product compliance EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A
	UPC-55	

UP-55MD

Colour Video Printer



Suitable for: Endoscopy, Microsurgery, Microscopy, Pathology

Designed for heavy-duty use, offering superb reliability and durability, this colour video printer is ideal for a host of medical applications.

- > A5 colour
- > RGB, Video & S-Video interface
- > Ultra compact
- > Easy image storage of printed images on USB flash memory ("USB Stick")
- > Multiple print modes; standard and 2, 4, 8 split print of different images

Features

- > HDTV (HD television) signal support accepting both 1080i and 720p signal types
- > Resolution of 379 dpi for photo-quality prints
- > A5 size print in approx. 20 seconds
- > Compact size and simple front operation

	Print Media:	Product compliance EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A
	UPC-55	

UP-990AD

Black & White Video and Digital Hybrid Printer for Blue Film and Paper



Suitable for: Dental X-Ray, C-Arm

The UP-990AD is ideal for simple image printing from mobile C-arm or other x-ray imaging equipment.

- > A4 monochrome
- > Composite video interface and USB 2.0
- > Thermal paper and Blue Film

Features

- > Thermal hybrid-interface graphic printer with 8 bit / 256 steps of grey level
- > High resolution of 325 dpi
- > High-speed printing of 8 seconds
- > Multiple print modes; standard, side and 2, 4 and 6-split print of different images
- > Auto paper cut function

	Print Media:	Product compliance EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A
	UPP-210SE    UPP-210HD    UPF210BL	

UP-970AD

Black & White Video and Digital Hybrid Printer



Suitable for: Dental X-Ray, C-Arm

Analogue and digital A4 black & white printer for medical, scientific and other applications.

- > A4 monochrome
- > Composite video interface and USB 2.0
- > Thermal paper

Features

- > Thermal hybrid-interface graphic printer with 8 bit / 256 steps of grey level
- > High resolution of 325 dpi
- > High-speed printing of 8 seconds
- > Multiple print modes; standard, side and 2, 4 and 6-split print of different images

	Print Media:	Product compliance EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A
	UPP-210HD    UPP-210SE	



UP-D897

Digital Black & White Printer



**Suitable for: Ultrasound, Endoscopy, Microsurgery, Microscopy, Pathology, Dental X-ray**  
The industry standard medical digital A6 black & white printer.

- > A6 monochrome
- > USB 2.0 interface

- Features**
- > 325 dpi resolution and 8 bit / 256 steps of grey level for high picture quality
  - > High-speed printing of approximately 2 seconds
  - > Multiple print modes available for a variety of applications

	Print Media:			Product compliance EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A
	UPP-110HG	UPP-110HD	UPP-110S	

UP-897MD

Black & White Video Printer



**Suitable for: Ultrasound, Endoscopy, Microsurgery, Microscopy, Pathology, Dental X-ray**  
The industry standard medical analogue A6 black & white printer.

- > A6 monochrome
- > Composite video interface
- > Compact and lightweight design

- Features**
- > 325 dpi resolution and 8 bit / 256 steps of grey level for high picture quality
  - > Hard copy prints in approximately 2 seconds (aspect ratio 4:3)
  - > Selectable 4:3 or 1:1 aspect ratio
  - > Automatic selection of EIA or CCIR video signal

	Print Media:			Product compliance EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A
	UPP-110HG	UPP-110HD	UPP-110S	

UP-D72XR

Black & White Digital Printer



**Suitable for: Dental X-Ray, C-arm**  
The UP-D72XR provides photo-quality output and has been specifically designed for use with X-ray systems, such as mobile C-arm units and dental X-ray systems.

- > 8"x10" monochrome
- > USB Interface
- > Thermal paper and Blue Film

- Features**
- > High resolution of 300 dpi
  - > Photo-quality prints with Sony direct thermal printing technology
  - > High-speed printing of approximately 45 seconds
  - > Precise Gamma-curve-adjustment capability

	Print Media:		Product compliance EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A
	UPP-735BL	UPP-725	

# Diagnostic clarity

## Dedicated radiology imagers

As one of the most critical disciplines in diagnosing health problems, radiology demands the ultimate in image clarity, quality and reliability. Being able to make a quick and accurate diagnosis from scans and X-rays remains an essential step in ensuring the best possible care for patients.

The Sony Medical specialist range of digital radiology imagers is designed to meet the precise needs and overcome

the specific challenges of medical professionals. Unlike large all-in-one imagers which feature a multitude of diverse capabilities, our imagers are small and personal – with a clear focus on maximising performance whilst minimising space and wastage.

Our imagers are dedicated for specialist radiology applications and designed for both Blue Film and monochrome paper imaging as well as colour paper

imaging. You pay only for what you need and benefit from the lowest possible capital investment and running costs.

As you would expect, our digital radiology imagers combine excellent reliability with high-speed on-demand imaging, market-leading image clarity and compact styling. All of which contributes to improved workflows and, ultimately, the efficacy of diagnosis.

UP-DF750

Multi-format Digital Diagnostic Film Imager



**Suitable for: Mammography, CR/DR, Computed Tomography, Magnetic Resonance**

The UP-DF750 Digital Film Imager features superior image quality through high resolution and high density printing.

- > Mammography compatible
- > DICOM interface
- > World's smallest footprint in its class

- Features**
- > Superior image quality through 604 dpi resolution and 14 bit processing
  - > Support for 10"x12" and 8"x10" Sony Mammography Blue Film (Dmax=3.8)
  - > Support for 14"x17", 11"x14", 10"x12" and 8"x10" Sony Blue Thermal Film (Dmax=3.2)
  - > High-speed imaging at a rate of up to 90 sheets of film per hour (8"x10")
  - > Fully flexible film trays accept any film size and type
  - > Large 3.8" graphic display with adjustable orientation
  - > Vertical installation capability for saving space
  - > Quick warm-up time of less than 2 minutes
  - > 40 Gamma curves for ultimate image quality adjustment versatility
  - > New advanced parameterised magnification types and DICOM configuration utility

	Print Media:			Product compliance EN 60601-1, EN 60601-1-2, R&TTE, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A
	UPF-S17BL	UPF-S14BL	UPF-S12BL	
	UPF-S10BL	UPF-M712BL	UPF-M710BL	

UP-DF550

Multi-format Digital Diagnostic Film Imager



**Suitable for: Computed Tomography, Magnetic Resonance, CR/DR**

The UP-DF550 Digital Film Imager for all DICOM compliant general radiology applications.

- > Multi-format Diagnostic Film Imager
- > DICOM interface
- > World's smallest footprint in its class

- Features**
- > Support for 14" x 17", 11"x14", 10"x12" and 8"x10" Sony Blue Thermal Film
  - > High resolution of 320 dpi and 12 bit processing
  - > High-speed printing at a rate of up to 85 sheets of film per hour (8"x10")
  - > Vertical installation capability for saving space
  - > 20 Gamma curves for advanced image quality adjustment
  - > Quick warm-up time of less than 2 minutes

	Print Media:		Product compliance EN 60601-1, EN 60601-1-2, R&TTE, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A
	UPF-S17BL	UPF-S14BL	
	UPF-S12BL	UPF-S10BL	



## UP-D77MD

## DICOM Colour Imager



**Suitable for: Computed Tomography (CT), Nuclear Medicine, PET-CT, Magnetic Resonance Imaging (MRI), PACS Endoscopy, Ultrasound**

The UP-D77MD for all DICOM compliant medical applications requiring high quality colour or monochrome paper prints.

- > A4/Letter size colour paper
- > DICOM interface
- > Compact and space-saving design

**Features**

- > High resolution of 300 dpi
- > Photo-realistic superior quality prints with Sony self-laminating dye sublimation printing technology offering optimal protection against fading, finger prints and water-based liquid
- > A4 media featuring a maximum image size of 203 x 272mm
- > High-speed printing of approximately 85 seconds (A4)
- > Front-loading operation for installation in the tightest spaces
- > Easy colour tuning with 25 versatile colour pre-sets
- > Advanced colour tuning via Service Tool



Print Media:

UPC-770

**Product compliance**

EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A

## UP-D74XRD

## Multi-media Dual Interface Digital Imager



**Suitable for: Computed Tomography, Magnetic Resonance, CR/DR, Dental X-Ray**

The UP-D74XRD is a compact and high-speed hybrid interface Imager, suitable for high-end reference film and paper printing.

- > Thermal paper and Blue Film
- > World's smallest footprint in its class

**Features**

- > Support for 8"x10" Inch Paper or Sony Blue Thermal Film
- > Front loading operation
- > Supporting USB 2.0 and DICOM Interface
- > High-speed printing at a rate of up to 90 sheets of film per hour
- > Quick warm-up time of less than 2 minutes
- > High resolution of 300 dpi with 9 bit greyscale printing
- > Super silent print engine



Print Media:

UPT-736BL

UPP-725

**Product compliance**

EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A

## Print media at a glance

## Delivering clarity through optimum print quality

Your choice of medical print media is vital in achieving durable, long-term image quality. To ensure the optimal performance and longevity of Sony medical printers, you need to choose Sony print media. Using media of lower grade not only results in poorer image quality, but is also likely to result in early printer failure and higher maintenance costs.

Specifically designed to match the mechanical characteristics of Sony medical printers, Sony print media guarantees the hassle-free delivery of high quality images by giving you:

- Superior print quality
- Accurate grey-scale and colour reproduction
- Head-matching performance
- Anti-electrostatic layer
- Minimal curling
- Advanced tearing properties
- High humidity and heat resistance

Size	Description	Comments	Model	Prints per pack or length	Printers			Number of rolls or packs	
					UP-DF750	UP-DF550	UP-DF500	Per subcarton	Per mastercarton
14x17"	Blue Thermal Film	For general Radiology	UPT-517BL	125	●	●	●		4
11x14"	Blue Thermal Film		UPT-514BL	125	●	●			4
10x12"	Blue Thermal Film		UPT-512BL	125	●	●			4
8x10"	Blue Thermal Film		UPT-510BL	125	●	●			4
10x12"	Blue Thermal Mammography Film	For Mammography application	UPT-M710BL	125	●				4
8x10"	Blue Thermal Mammography Film		UPT-M712BL	125	●				4
					UP-D74XRD		UP-D72XR		
8x10"	Blue Thermal Film		UPT-736BL	100	●				5
8x10"	Blue Thermal Film		UPT-735BL	100			●		5
8x10"	Thermal Printing Paper		UPP-725	100	●		●		5
					UP-D77MD	UP-D75MD	UP-DR80MD		
A4	Self-laminating Colour Printing Pack		UPC-770	72	●	●			5
A4	Self-laminating Colour Printing Pack		UPC-R80MD	50x2			●		4
					UP-990AD		UP-970AD		
A4	Blue Thermal Film	(Type III)	UPT-210BL	12.5m	●			5	20
A4	Thermal Printing Paper	(Type II: High Density)	UPP-210HD	25m	●		●	5	20
A4	Thermal Printing Paper	(Type I: High Quality)	UPP-210SE	25m	●		●	5	20
					UP-55MD/D55				
A5	Colour Printing Pack		UPC-55	100x2	●				5
					UP-20/21MD/D23MD		UP-25MD/UP-D25MD		
A6	Colour Printing Pack		UPC-21L	50x4	●		●		6
A6	Colour Printing Pack		UPC-21S	80x3	●		●		6
A6	Self-laminating Colour Printing Pack		UPC-24LA	40x4			●		6
A6	Self-laminating Colour Printing Pack		UPC-24SA	60x3			●		6
					UP-897MD/D897				
A6	Thermal Printing Paper	(Type V: High Glossy)	UPP-110HG	18m	●			10	100
A6	Thermal Printing Paper	(Type II: High Density)	UPP-110HD	20m	●			10	100
A6	Thermal Printing Paper	(Type I: High Quality)	UPP-110S	20m	●			10	100

All print quantity numbers are measured in default setting.  
All non-metric weights and measures are approximate.





# OLED – innovating clarity

## The new standard in medical imaging

Setting new standards in clarity once again, Sony has created the world's first dedicated medical monitor to feature our unrivalled Organic Light-Emitting Diode (OLED) technology: the PVM-2551MD.

Enabling clinicians to see images in the highest contrast ratio ever – with no picture delay – this groundbreaking 24.5 inch\* medical monitor delivers the ultimate black reproduction for ideal luminance in light and dark areas. Providing the most realistic accuracy for surgical interventions and screening endoscopies, this breakthrough in medical imagery ensures every detail is visible in perfect clarity.

\* Viewable area, measured diagonally.

### Wide dynamic range

#### Accurate colour reproduction in dark areas of the displayed image

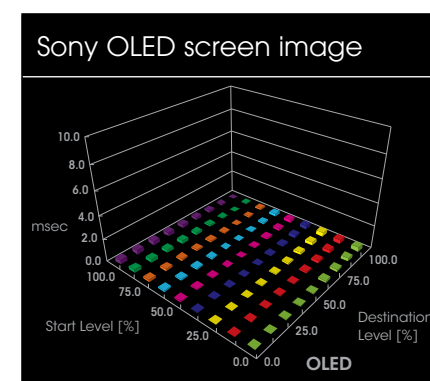
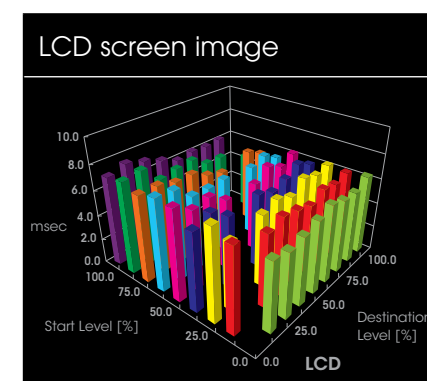
Thanks to Sony TRIMASTER EL technology, the Sony OLED monitor is capable of reproducing pure black, faithful to the source signal. It provides superb colour reproduction, especially for dark images. This enables medical

professionals to observe very subtle details in each image. For example, the faint colour differences of tissue under low-light conditions such as blood vessels, membrane and fat, are correctly reproduced.

### Quick response

#### Virtually no motion blur

Because the OLED electroluminescent layer inherently responds to any electrical current input, it emits light with virtually no delay. It therefore achieves superb quick response performance for fast moving images. This efficient blur-free, fast response time is beneficial for a variety of critical medical applications, such as rigid endoscopic surgery and flexible endoscope investigation.

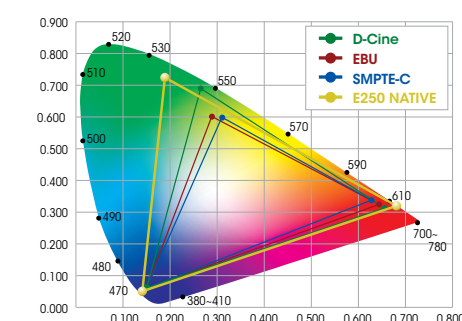


### Wide colour gamut

#### Reproduces small differences in colour

Sony OLED technology displays the largest colour range of any Sony monitor previously offered. The Sony micro-cavity structure uses an optical resonance effect in combination with accurate colour filters to calibrate and stabilise RGB colour accuracy.

This combination is also effective in reducing ambient light reflection, and consequently deep colour reproduction can be achieved with virtually no degradation, particularly in bright environments.



## PVM-2551MD

## Medical OLED Monitor



With its exceptional picture quality and medical-friendly design, the PVM-2551MD ushers in a new era of exceptional medical monitoring.

The PVM-2551MD features the newly developed dedicated OLED processor and establishes a new, improved standard of critical-image monitoring.

Sony innovative OLED technology delivers deep black, high-contrast, accurate colour reproduction and quick response times with virtually no motion blur.

In addition, the PVM-2551MD employs a high-performance noise filter which reduces effects on the monitor image that typically occur when an electrosurgical knife is used during surgery.

The PVM-2551MD complies with the 100mm hole spacing VESA mounting standard, making it ideal for use with a variety of medical installations.



Product compliance  
EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A



**HD**

## HD – precision clarity

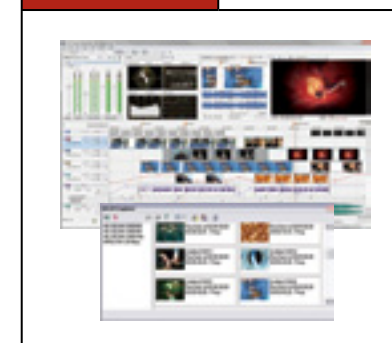
### Delivering the sharpest detail in HD medical imaging

Having pioneered the development of HD, Sony expertise underpins our HD medical workflow. Whilst ensuring precision clarity at every stage, our superior quality medical imaging bridges the physical gap between doctor and patient, helping to improve the quality of diagnosis and care.

With x4 the resolution of SD technology, Sony HD technology also aims to maximise the academic benefits for colleagues and medical students. Our HD images offer a dramatic increase in the sharpness of anatomical detail, providing clarity and pinpoint precision for all medical professionals.

High Definition

25

**Capture****Display****Record****Edit****Archive****Distribute****Print**

You can rely on the leader in medical imaging technology for ultra compact cameras that capture the most intricate detail with advanced HD clarity.

Now professionals and students can all benefit from a clearer picture of surgical procedures with displays that show the different colours of blood and distinguish between different types of tissue.

Compact, versatile recording solutions incorporating patient data while delivering long-lasting picture quality,

random access capability and enhanced security that incorporates patient data.

As the unrivalled experts in networked video and media management, we deliver complete control of all digital data for more tailored teaching and colleague collaboration.

Purpose-built, reliable technology with superb colour reproduction and exceptional durability to assist accurate and consistent diagnosis.

Workflow-friendly, cost-efficient, dependable and secure solutions with the capacity to store and share the massive and continually increasing volume of digital medical data.

The highest image and sound quality for more immersive group teaching and colleague collaboration, sharing HD digital still and moving images across campuses and around the world.

Cameras



Recorders



Monitors



Printers



OLED



High Definition

HD



## Perception and discrimination

Everyone knows the closer you are to something, the more detail you see. The human eye can discriminate detail within about 1 minute of arc (MOA). This is the equivalent to being able to see 1mm lines from about 3½ metres away.

Therefore the larger the monitor or viewing screen, or the nearer you sit to it, the more detail you see. The ideal size of screen or viewing distance, is when the screen's line structure is just imperceptible. If you sit any nearer or the screen is any larger, the image begins to break up as you see the

individual pixels. Too far away, or too small a screen, and you cannot see all the image's available detail. This is why our HD line-up is so important to medical practitioners: when it comes to a patient's health, no detail is too small.

## Pixels and resolution

### SD pixels and resolution

The resolution of 625 line SD television (PAL) is 720 x 576 pixels, or 414,720 pixels in total (shown below). This is shown as a 4:3 image. PAL pixels are therefore not square but slightly tall.

### HD pixels and resolution

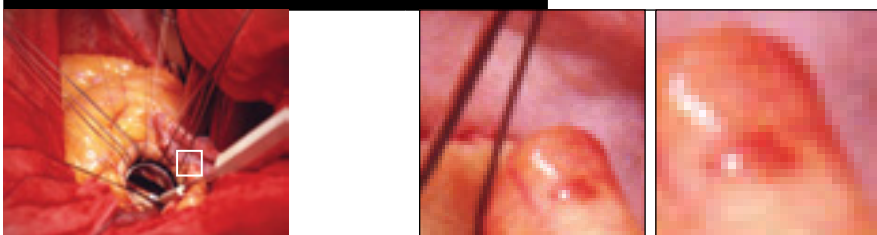
The resolution of 1080 HD is 1,920 x 1,080 pixels, or 2,073,600 pixels in total (shown below). The resolution of 720 HD is 1280 x 720 pixels, or 921,600 pixels. Both 1080 HD and 720 HD are a true 16:9 image with square pixels.

Comparing PAL with 1080 HD. In comparison both images are made the same height.

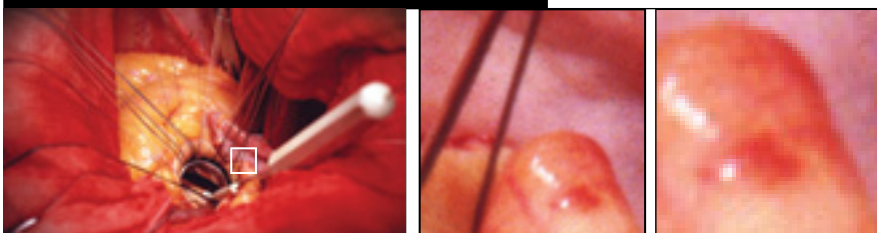
### Comparing SD and HD

There are about 5 times as many 1080 HD pixels as PAL television. There are just over twice as many 720 HD pixels as PAL television. The 4:3 portion of a 1080 HD image is 1,440 x 1,080 or 1,555,200 pixels. The same portion of a 720 HD image is 960 x 720 or 691,200 pixels. If both images are displayed at the same height, each 1080 pixel is a little over the size of a PAL television pixel. Each 720 pixel is 2/3 the size of a 625 line television pixel.

#### Standard Definition (PAL 720x576)

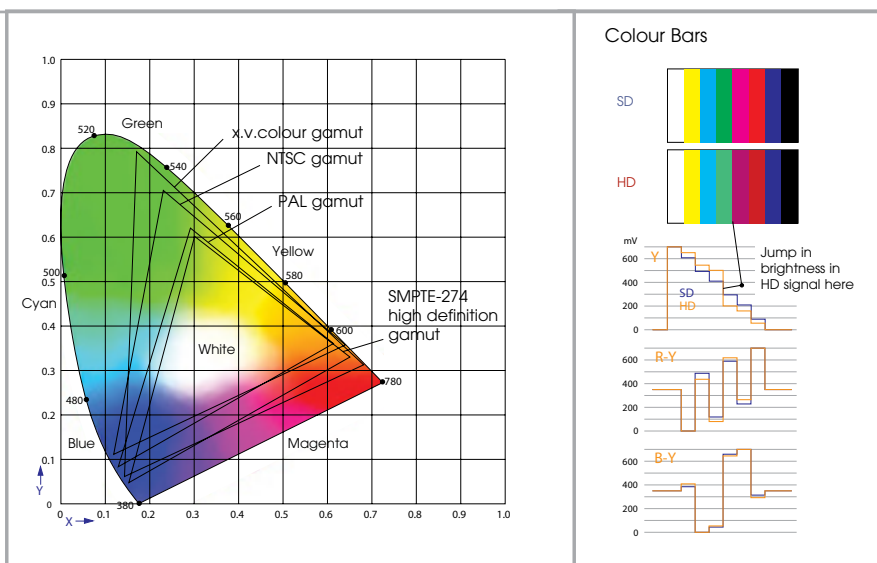


#### 1080 HD High Definition (1920x1080)



## HD and colour

HD television offers a new colour space with a redefined Y. For professionals, there is a jump in brightness in the colour bars standard test signal between green and magenta. The new standard also extends this gamut even further for selected HD equipment.



## HVO-1000MD

### Full HD Hard Disc Video Recorder



To make efficient use of the operating theatre and to drastically improve the way doctors use surgery images, the HVO-1000MD offers many recording advantages and makes a significant contribution to effective hospital data management.

- > Superior quality, highly compact design
- > High quality HD recording
- > Simultaneous recording
- > Easy to use operation



Product compliance  
EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class B

## LMD-2451MD

### 24 inch Medical LCD Monitor



Our innovative LMD-2451MD with Advanced Image Processing Technology enables users to see still and moving images with accurate, HD clarity and-pinpoint precision - making it ideal for critical endoscopic applications. The extraordinary quality and resolution of the HD images means that new, intricate surgical procedures may be attempted, creating the possibility for new approaches to medical treatment to be developed. The HD 24-inch\* medical monitor with class-leading resolution picture is so exceptional it vastly improves the detail of all small structures.

- > Advanced full 10-bit digital video signal processor to produce accurate, life-like images with smooth and natural gradation
- > Multiple display modes such as Picture-out-Picture and Side-by-Side
- > Accepts almost any signal ranging from SD to HD video in both analogue and digital, as well as PC signals via its DVI-D or HD15 connectors
- > Complies with the 100mm hole spacing VESA mounting standard making it ideal for use with surgical equipment arms



\*viewable area, measure diagonally

Product compliance  
EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A

## PMW-10MD

### The First Full HD Medical Certified Camera from Sony



Suitable for surgical microscopy and endoscopy, the first Sony HD medical camera features groundbreaking technology for the ultimate image quality.

- > Superior quality, highly compact camera head
- > New high-performance, ½" Exmor™ Full HD 3CMOS imager
- > 1920 x 1080 resolution and 2.2 mega pixels
- > Exclusively designed, compact and lightweight ½" C-mount prism assembly
- > Excellent picture quality with low power consumption: F10 sensitivity, 54dB S/N ratio and 450% dynamic range



Product compliance  
EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A



3D

## 3D – the new dimension in clarity

### Adding spatial orientation with 3D medical imaging

Continuing to deliver pioneering innovation through technical advances, Sony Medical is now enabling surgeons to take advantage of full depth perception and spatial orientation during intricate procedures with high clarity 3D images.

We remain dedicated to developing this breakthrough technology, bringing even greater clarity and precision to medical imaging in the pursuit of ever-more accurate diagnostics and surgical interventions.

### Delivering clear 3D Images for precise perceived depth and spatial orientation

Sony 3D technology represents a major breakthrough in medical precision and development, enabling surgeons to gain detailed insights and spatial orientation during complicated operations.

The delivery of pin-sharp images is achieved by combining our 3D technology with Sony advanced LCD displays. All our monitors undergo a multi-stage calibration process, which ensures a true-to-original reproduction of the object under examination. This is indispensable not only for high precision but also for uniformity between monitors.

Before shipping monitors, Sony Medical calibrates each individual panel to ensure that the RGB coordinates are identical. A further calibration ensures that the white balance has a consistent colour temperature across all greyscales.



BKM-30G 3D glasses

Sony 3D monitors process different 3D signal formats such as 3G-SDI, dual stream left and right and field mode, as well as Side-by-Side HD SDI and DVI-D line-interleave mode (line-by-line). The display can process numerous signals, ranging from practically all SD and HD video signals, to computer signals that are fed in via the DVI-D or HD15 connection.

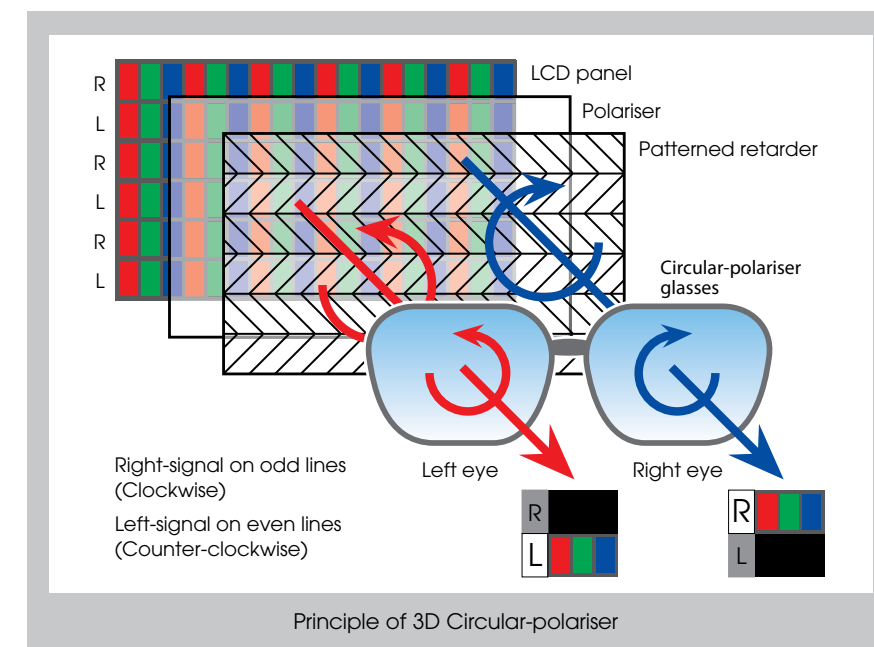
### Surgical certainty

User-defined storage, chroma phase control and ChromaTRU technology all optimise our monitors' images. These give the surgeon certainty that his hand movements are reproduced true to detail, even during complex procedures such as incisions and suturing.

With the aid of lightweight, easy-to-wear 3D polarisation glasses, users can also view several monitors seamlessly and without interruption.

To provide a three-dimensional image during surgery or for transmission for educational or in-service training purposes, users can attach two Sony PMW-10MD cameras to an operating microscope and show the images on compatible Sony 3D monitors, such as the LMD-4251TD.

To complete the 3D workflow, the Sony HVO-1000MD HD recorder can easily be combined with a 3D converter box to record outstanding 3D videos and stills. The HVO-1000MD is first and foremost a medical HD video recorder, but can also stream video material in 2D to conference rooms and lecture theatres. It outputs images in many different formats, such as Blu-ray and DVD, or for USB storage media.





LMD-2451MT

24 inch 3D Medical LCD Monitor



Suitable for Endoscopic Surgery, Conferences, Education, Training

Currently, most of the 3D monitoring systems being used in medical modality applications are based on SD resolution. Users are unhappy with this level of 3D picture quality and the way it compromises the usability of conventional 3D monitoring systems for endoscopic surgery. With the introduction of the Sony Medical high-performance 3D LCD monitor LMD-2451MT, however, improved digital technologies for 3D monitoring – including HD resolution – are now available.

- > Incorporates a circular-micro polariser filter attached to the LCD panel and is supplied with circular-polariser 3D glasses to deliver a stress-free viewing experience of natural depth, plus smooth, uninterrupted viewing of multiple monitors and flicker-free 3D images
- > Optional BKM-250TG 3G-SDI input adaptor enables a variety of 3D display functions – including Disparity Simulation, Checkerboard Display and L/R Switch – to support optimum 3D settings and adjustments
- > 2D monitor functionality with features upper-compatible with those of Sony LMD-2450MD and LMD-2451MD medical monitors

	<b>Product compliance</b> EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A
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LMD-4251TD

42 inch 3D Medical LCD Monitor



Suitable for Endoscopic Surgery, Conferences, Education, Training

This widescreen 3D medical LCD monitor incorporates a micro-polariser filter attached to the LCD panel, and is supplied with lightweight circular polariser 3D glasses for stress-free, smooth and uninterrupted viewing of multiple monitors.

- > WUXGA (1920 x 1080 pixels) LCD panel provides Full HD resolution images
- > High purity colour filters ensure precise colours
- > Optimised for group viewing with a very wide viewing angle
- > 2D/3D functionality maximises ROI
- > Future-proofed longevity with multi-format and HD capability, plus optional decoder boards

	<b>Product compliance</b> LVD, EMC, UL 60950-1, CSA C22.2 No. 60950-1, FCC / IC Class B
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HVO-1000MD

3D Medical Recorder



Suitable for: Video Recording, Streaming Video, Multi-format Content Distribution

Every aspect of the HVO-1000MD is aimed at optimising critical time during medical procedures, whilst capturing outstanding 3D video and images. With its simple controls, it can record to multiple media formats simultaneously. By using a 3D converter box, the HVO-1000MD can record images Side-by-Side, which can then be displayed on the LMD-2451MT.

Although primarily a HD medical video recorder, the HVO-1000MD is also a multipurpose delivery device, capable of streaming video to conference rooms and lecture theatres, and distributing content on a wide range of recording formats – including Blu-ray.

	<b>Product compliance</b> EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class B
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PMW-10MD

3D Medical Camera



Suitable for: Surgical Microscopy

Delivering outstanding image quality, extremely long recording time and a range of advanced features, the PMW-10MD is an ideal medical camera that improves both image clarity and operational efficiency.

For 3D applications, two PMW-10MD cameras can be easily attached to microscopes to record precise image footage for the LMD-2415MT monitor. High quality images not only support surgical interventions, but are also beneficial to conference and education applications.

	<b>Product compliance</b> EN 60601-1, EN 60601-1-2, UL 60601-1, CSA C22.2 No. 601.1, FCC / IC Class A
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# Accessories

## Accessories for Image Capture

### RM-C950

Remote Control Unit



DXC-990P

DXC-390P

DXC-C33P

### CMA-D2MD

Camera Adaptor



DXC-990P

DXC-390P

### CMA-D3CE

Camera Adaptor



DXC-990P

DXC-390P

## Cables

	Model	Length	In	Out	DXC-390P/ DXC-990P	DXC-C33P	PMW-10MD	MDD Approved
	CCDC-	5/10/25/ 50A/100A	12-pin	4-pin DC Cable	•			•
	CCMC-20P	5/10/30	20-pin	20-pin		•		•
	CCMC-T	50/10/15/20					•	•
	CCXC-12P	5/10/25	12-pin	12-pin multicore	•			•
	CCZ-A	5/10/25/50/100	26-pin	26-pin	•			
	CCMC-3MZ	3	26-Pin	12-Pin, 9-Pin D-Sub, 8-Pin Mini DIN and BNC	•			
	CCMC-9DS	5	9-pin	4BNC, DIN 4-pin	•	•		•
	CCMC-9DB	5	9-pin	5BNC		•		
	CCXC-9DBS	5	9-pin	4BNC, DIN 4-pin	•			•

## Accessories for Image Recording

### DSRM-10

Remote Control Unit



DVO-1000MD

### SVRM-100A

Remote Control Unit



DVO-1000MD

### VMC-IL6615B/IL6635B

i.LINK Cable (6-pin to 6-pin)



PDW-75MD

DVO-1000MD

### VMC-IL4615B/IL4635B

i.LINK Cable (6-pin to 4-pin)



PDW-75MD

DVO-1000MD

### RCC-5G

Remote Control - Cable (5m)



PDW-75MD

### BKM-220D

SDI 4:2:2 Input Adaptor



LMD-1951MD

LMD-2140MD

LMD-2451MD

LMD-3250MD

### BKM-227W

Analogue Component Input Adaptor



LMD-1951MD

LMD-2140MD

LMD-2451MD

LMD-3250MD

### BKM-229X

Analogue Component Input Adaptor



LMD-1951MD

LMD-2140MD

LMD-2451MD

LMD-3250MD

### BKM-243HS

HD SDI&SDI Input Adaptor



LMD-1951MD

LMD-2451MD

LMD-3250MD

### BKM-256DD

DVI Input Expansion Board



LMD-1951MD

LMD-2451MD

### BKM-250TG

3G/HD/SD-SDI Input Adaptor



LMD-1951MD

LMD-2451MD

LMD-2451MT

LMD-4251TD

### BKM-320D

SD-SDI Input Adaptor



LMD-1530MD

### BKM-341HS

HD-SDI Adaptor



LMD-2110MD

### SU-32FWS

Silver Display Stand 32" LCD



LMD-3250MD

### SU-560

Display Stand



LMD-1951MD

LMD-2140MD

PVM-2451MD

PVM-2551MD

### AC-110MD

AC Adaptor for LMD Monitors



LMD-1951MD

LMD-2451MD

LMD-3250MD

### BKM-30G

Circular-polariser 3D Glasses



LMD-2451MT

LMD-4251TD

### BKM-31G

Clip-on Type  
Circular-polariser 3D Glasses



LMD-2451MT

LMD-4251TD



## UPT-M712BL

Blue Thermal Mammography Film

Contents:  
125 sheets of print film  
Paper size:  
253 x 304mm  
(10 x 12 inches)



Size: 10 x 12

UP-DF750

## UPT-514BL

Blue Thermal Film

Contents:  
125 sheets of print film  
Paper size:  
279 x 354mm  
(11 x 14 inches)



Size: 11 x 14

UP-DF750

UP-DF550

## UPT-736BL

Blue Thermal Film

Contents:  
100 sheets of print film  
Paper size:  
203 x 254mm  
(8 x 10 inches)



Size: 8 x 10

UP-D74XRD

## UPC-R80MD

Self-laminating Colour Printing Pack

Contents:  
2x 50 sheet print  
paper roll for 100 prints  
2x ink ribbon  
Paper size:  
210mm (W) x 16m



Size: A4

UP-DR80MD

## UPC-21S

Colour Printing Pack

Contents:  
240 sheets of print paper  
3 rolls of ink ribbon  
Paper size:  
100 x 90mm  
(4 x 3 5/8 inches)



Size: A6

UP-20

UP-21MD

UP-25MD

UP-D25MD

UP-D23MD

## UPC-24SA

Colour Printing Pack

Contents (small size):  
180 sheets of  
print paper  
(60 sheets x 3 packs)  
3 rolls of ink ribbon



Size: A6

UP-25MD

UP-D25MD

## UPT-M710BL

Blue Thermal Mammography Film

Contents:  
125 sheets of print film  
Paper size:  
202 x 253mm  
(8 x 10 inches)



Size: 8 x 10

UP-DF750

## UPT-512BL

Blue Thermal Film

Contents:  
125 sheets of print film  
Paper size:  
253 x 304mm  
(10 x 12 inches)



Size: 10 x 12

UP-DF750

UP-DF550

## UPT-735BL

Blue Thermal Film

Contents:  
100 sheets of print film  
Paper size:  
203 x 254mm  
(8 x 10 inches)



Size: 8 x 10

UP-D72XR

## UPC-770

Self-laminating Colour Printing Pack

Contents:  
72 sheets of print paper  
a roll of ink ribbon  
Paper size:  
210 x 298mm  
(8 3/8 x 11 3/4 inches)



Size: A4

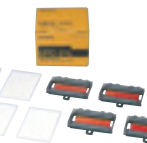
UP-D77MD

UP-D75MD

## UPC-21L

Colour Printing Pack

Contents:  
200 sheets of print paper  
4 rolls of ink ribbon  
Paper size:  
144 x 100mm  
(5 3/4 x 4 inches)



Size: A6

UP-20

UP-21MD

UP-25MD

UP-D25MD

UP-D23MD

## UPC-24LA

Colour Printing Pack

Contents (large size):  
160 sheets of  
print paper  
(40 sheets x 4 packs)  
4 rolls of ink ribbon



Size: A6

UP-25MD

UP-D25MD

## UPT-517BL

Blue Thermal Film

Contents:  
125 sheets of print film  
Paper size:  
354 x 430mm  
(14 x 17 inches)



Size: 14 x 17

UP-DF750

UP-DF500

## UPT-510BL

Blue Thermal Film

Contents:  
125 sheets of print film  
Paper size:  
202 x 253mm  
(8 x 10 inches)



Size: 8 x 10

UP-DF750

UP-DF550

## UPP-725

Thermal Printing Paper

Contents:  
100 sheets of print media  
Paper size:  
203 x 254mm  
(8 x 10 inches)



Size: 8 x 10

UP-D74XRD

UP-D72XR

## UPC-55

Colour Printing Pack

Contents:  
200 sheets of print  
paper  
2 rolls of ink ribbon



Size: A5

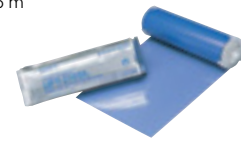
UP-D55

UP-55MD

## UPT-210BL

Blue Thermal Transparent Film (Type III)

Paper size:  
210mm (W) x 12.5 m  
Print quantity:  
42 prints (6-split)



Size: A4

UP-990AD

## UPP-110HG

Thermal Print Media  
(Type V: High Glossy)

Paper size:  
110mm (W) x 18 m  
Print quantity:  
193 prints



Size: A6

UP-897MD

UP-D897

## RM-91

Remote Control Unit

Connector: Stereo mini  
Cable length: 5 m  
Mass: 80 g (3 oz)  
Supplied accessory:  
Operation manual



Remote Commander

UP-20

UP-21MD

UP-55MD

UP-897MD

UP-990AD

UP-970AD

## UPP-210HD

Thermal Transparent Film  
(Type II: High Density)

Paper size:  
210mm (W) x 25 m  
Print quantity:  
139 prints  
(with UP-990AD/970AD)



Size: A4

UP-990AD

UP-970AD

## UPP-110HD

Thermal Print Media  
(Type II: High Density)

Paper size:  
110mm (W) x 20 m  
Print quantity:  
215 prints



Size: A6

UP-897MD

UP-D897

## FS-24

Foot Switch

Connector:  
Stereo Mini Jack  
Cable Length: 5 m  
Water proofing: IPX3



Remote Commander

UP-20

UP-21MD

UP-55MD

UP-897MD

UP-990AD

UP-970AD

## UPP-210SE

Thermal Transparent Film  
(Type I: High Quality)

Paper size:  
210mm (W) x 25 m  
Print quantity:  
139 prints  
(with UP-990AD/970AD)



Size: A4

UP-990AD

UP-970AD

## UPP-110S

Thermal Print Media  
(Type I: High Quality)

Paper size:  
110mm (W) x 20 m  
Print quantity:  
215 prints



Size: A6

UP-897MD

UP-D897

## UPA-500

Cleaning Kit

Contents:  
Cleaning roller x 5  
Cleaning paper x 5  
Head lapping film x 1



Cleaning Kit

UP-DF750

UP-DF550

UP-DF500



All products on this page are MDD approved.

# Specifications

## Specifications for Image Capture

### Colour Video Camera

#### PMW-10MD



#### DXC-C33P



System		
Image device	3-chip ½ inch Exmor CMOS	3 CCD ⅓ inch EXWAVE HAD Sensor
Effective picture elements	1920 x 1080	752 (H) x 582 (V)
Sensing area		4.8 (H) x 3.6 (V)mm
Scanning system	1080i50/i59,94	2:1 interlaced, 625 TV lines
Horizontal frequency		15.625 kHz
Vertical frequency		50Hz
Sync system	External with BNC (x1)	Internal or external with VBS, HD/VD
Phase control		H/SC phase control
Horizontal resolution	1000 TV lines	850 TV lines
Lens mount	C mount	C mount
Flange back	17.526mm	17.526mm
Sensitivity	F10 typical (in 1920 x 1080/59.94i mode)	F8.0 at 2000 lx
Minimum illumination	0.14 lx (in 1920 x 1080/59.94i mode, F2.2, +21 dB gain, with 64-frame slow shutter)	4 lx (F2, GAIN: HYPER)
S/N ratio	54 dB (Y) (typical)	61dB
Gain	0 to 21 dB	STEP/AGC/HYPER selectable, STEP: 0 to 24 dB by 1 dB step, AGC: 0 to 24 dB (Limit value: 6 dB, 12 dB, 18 dB, 24 dB selectable), HYPER: 30 dB
Shutter speed	60i: 1/60, 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000, 1/20000 50i: 1/60, 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000, 1/16000	8.0 to 1/100,000 s
Electronic shutter	OFF/SPEED/ECS/SLS/EXSLs	OFF/STEP/VARIABLE/CCD IRIS/KNOB selectable
Iris	Manual	Manual
AE area	Multi/Large/Medium/Spot/Slit Selectable	Multi/Large/Medium/Spot/Slit/Manual selectable
AE speed	-99 to +99	Fast/Mid/Slow selectable
AE detect	Backlight, Standard, Spotlight	Average/Peak selectable
Contrast effect		Manual/DynaLatitude/DCC+ selectable
Knee point	Auto, Point, Slope, Manual	High/Mid/Low/Off selectable (Contrast Effect: Manual)
Black stretch	Variable Black max / Black min	Variable (Contrast Effect: Manual)
Gamma	Variable	On/Off (Variable at ON)
Pedestal	Master, R/B Manual	Master and R/B Manual adjustable
Black balance	-99 to +99	ABB
White balance	Preset/Memory/ATW	AWB/ATW normal/ATW wide/Manual/3200 K/5600 K selectable AWB or ATW R/B paint, manual R/G gain
ATW area	Normal/manual selectable	Normal/Manual selectable
ATW speed	1(slow) -5(fast) selectable	Fast/Mid/Slow selectable
Detail level	-99 to +99	All/Target/Off (Variable at All or Target)
Detail frequency	-99 to +99	High/Mid/Low selectable
Linear matrix		All/Target/Off (Variable at All or Target)
Linear matrix mode	ALL/Target/OFF/Select	Standard/R Enhance/G Enhance/B Enhance/Manual selectable
Partial enhance	-99 to +99, Type1-Type4	All/In/Out selectable
CCD integration mode	G-B, B-G, G-R, R-G, R-B, B-R	Field/Frame selectable
Shading compensation		Off/On (Manual control)
Baud rate	Manual	19200/9600/4800/2400/1200 selectable
Sync	Up to 38400	RGB/G/Off selectable
Trigger	CMOS/ Open Collector ext Sync BNC	On (Positive edge trigger/Negative edge trigger)/Off
Strobe		Slave
User file	Slave	A/B switchable
Scene file	Profile 1 - Profile 5 (selectable)	Standard/Microscope/Full Auto/Strobe/File A or B
Output signals	HD-SDI, Composite, S-Video (Y/C), Y,Pb,Pr, DVI-D programmable (via Profile 1- 5)	VBS, RGB/SYNC, Y/C, i.LINK(DV)
Serial data	RS-232C	RS-232C
Connectors (on Camera Control Side)	Camera input: 36-pin (x1), MIC input: Stereo mini-jack (x1), Composite output: BNC (x1), S-Video output: mini DIN 4-pin (x1) Component output: D-Sub 15-pin (x 1), DVI-D output: DVI connector 19-pin (x1), HD SDI output: BNC (x 2), EXT SYNC input: BNC (x1), FS,TRIG IO: Stereo mini-jack (x1), Remote: D-sub 9-pin (x1)	DV OUT (6-pin jack), RGB/SYNC (9-pin D-sub) VIDEO OUT (BNC), S-VIDEO (4-pin mini DIN), FS/TRIG IN (Stereo Mini jack), REMOTE (8-pin mini DIN), AC Inlet, Camera (20-pin), EXT SYNC IN (BNC)
Measurements		
Dimensions	CHU : 35 x 45 x 50mm (1 7/16 x 1 13/16 x 2 inches) without projection CCU : 200 x 88 x 240mm (7 7/8 x 3 1/2 x 9 1/2 inches) without projection	CHU: 32 x 38 x 40mm (1 5/16 x 1 1/2 x 1 5/8 inches) CCU: 200 x 88 x 242mm ( 7 7/8 x 3 1/2 x 9 5/8 inches)
Mass	CHU : Approx. 90 g (3.2 oz) CCU : Approx. 2.8 kg (6 lb 3 oz)	CHU: 48 g (1.7 oz) CCU: 2.5 kg (5 lb 8 oz)
Power		
Requirements	AC 100 to 240 V, 50/60 Hz	AC 100 to 240 V, 50/60 Hz
Consumption	0.6-0.36 A (Max.30 W)	Max. 18 W
Operating conditions		
Temperature	0 to +40 °C (+32 to +104 °F)	-5 to 45°C (23 to 113°F)
Storage/Transporting conditions		
Temperature	-20°C to 60°C (-4°F to 140°F)	-20 to 60°C (-4 to 140°F)

## Specifications for Image Capture

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### Colour Video Camera

#### DXC-390P



#### DXC-990P



System		
Image device	3 CCD ⅓ inch EXWAVE HAD Sensor	3 CCD ½ inch EXWAVE HAD Sensor
Effective picture elements		752 (H) x 582 (V)
Sensing area	4.8 (H) x 3.6 (V)mm	6.4 (H) x 4.8 (V)mm
Scanning system	2:1 interlaced, 625 lines	
Horizontal frequency	15.625 kHz	
Vertical frequency	50Hz	
Sync system	Internal or external with VBS, HD/VD	
Phase control	H/SC phase control	
Horizontal resolution	800 TV lines	850 TV lines
Lens mount	C mount	Bayonet mount
Flange back	17.526mm	38.00mm
Sensitivity	F8.0 at 2000 lx	F11 at 2000 lx
Minimum illumination	4 lx (F2, GAIN: HYPER)	1 lx (F1.4, GAIN: HYPER)
S/N ratio	61dB	62 dB
Gain	STEP/AGC/HYPER selectable STEP: 0 to 24 dB by 1 dB step AGC: 0 to 24 dB (Limit value: 6 dB, 12 dB, 18 dB, 24 dB selectable) HYPER: 30 dB	
Shutter speed	8.0 to 1/100,000 s	0.5 to 1/100,000 s
Electronic shutter	OFF/STEP/VARIABLE/CCD IRIS selectable	
Iris	Auto/Manual	
AE area	Multi/Large/Medium/Spot/Slit/Manual selectable	
AE speed	Fast/Mid/Slow selectable	
AE detect	Average/Peak selectable	
Contrast effect	Manual/DynaLatitude/DCC+ selectable	
Knee point	High/Mid/Low/Off selectable (Contrast Effect: Manual)	
Black stretch	Variable (Contrast Effect: Manual)	
Gamma	On/Off (Variable at ON)	
Pedestal	Master and R/B Manual adjustable	
Black balance	ABB	
White balance	AWB/ATW normal/ATW wide/Manual/3200 K/5600 K selectable AWB or ATW R/B paint, manual R/G gain	
ATW area	Normal/Manual selectable	
ATW speed	Fast/Mid/Slow selectable	
Detail level	All/Target/Off (Variable at All or Target)	
Detail frequency	High/Mid/Low selectable	
Linear matrix	All/Target/Off (Variable at All or Target)	
Linear matrix mode	Standard/R Enhance/G Enhance/B Enhance/Manual selectable	
Partial enhance	All/In/Out selectable	
CCD integration mode	Field/Frame selectable	
Shading compensation	Off/On (Manual control)	
Baud rate	19200/9600/4800/2400/1200 selectable	
Sync	RGB/G/Off selectable	
Trigger	On (Positive edge trigger/Negative edge trigger)/Off	
Strobe	Slave	
User file	A/B switchable	
Scene file	Standard/Microscope/Full Auto/Strobe/File A or B	
Output signals	VBS, RGB/SYNC, Y/C	VBS, RGB/SYNC, Y/C, Y/R-Y/B-Y
Serial data	RS-232C	RS-232C
Connectors	RGB/SYNC (9-pin D-sub), DC IN/VBS (12-pin), VIDEO OUT (BNC), TRIGGER IN (BNC), REMOTE (8-pin mini DIN), LENS (6-pin)	RGB/SYNC (9-pin D-sub), DC IN/VBS (12-pin), VIDEO OUT (BNC), TRIGGER IN (BNC), REMOTE (8-pin mini DIN), GEN LOCK IN (BNC) LENS (6-pin)
Measurements		
Dimensions	56 x 50 x 128mm (2 1/4 x 2 x 5 1/8 inches)	70 x 72 x 123.5mm (2 7/8 x 2 7/8 x 4 7/8 inches)
Mass	Approx. 370 g (13 oz)	Approx. 630 g (1 lb 6 oz)
Power		
Requirements	DC 10.5 to 15.0 V	
Consumption	Approx. 7.6 W	
Operating conditions		
Temperature	-5 to 45°C (23 to 113°F)	
Storage/Transporting conditions		
Temperature	-20 to 60°C (-4 to 140°F)	






System	
Recording system	DVD Recording, NTSC/PAL Switchable
Recording format	Video: MPEG-2 compression/Audio: Dolby Digital format
Recordable media	DVD+RW (2.4x and 4x speed)
Recording time	HQ Mode: 60 minutes/SP Mode: 120 minutes/LP Mode: 180 minutes
Safety standards	IEC60601-1, EN60601-1, UL60601-1, CAN/CSA C22.2 No.601.1
Input/Output	
Analogue composite input	BNC x2, with loop-through, unbalanced, 1.0 Vp-p, 75 Ω
S-video input	4-pin DIN x2, with loop-through, Y: 1.0 Vp-p, 75 Ω, unbalanced, C: 0.286 Vp-p (NTSC)/0.3, Vp-p (PAL), 75 Ω, unbalanced
Analogue composite output	BNC x1, 1.0±0.2 Vp-p, 75 Ω, unbalanced
S-video output	4-pin DIN x1 Y: 1.0 Vp-p, 75 Ω, unbalanced, C: 0.286 Vp-p (NTSC)/0.3 Vp-p (PAL), 75 Ω, unbalanced
Analogue audio input	RCA Pin x2 (L/R), 2 Vrms (full bit), input impedance 47 kΩ
Analogue audio output	RCA Pin x2 (L/R), 2 Vrms (full bit), load impedance 47 kΩ
Monitor audio output	Monitor RCA Pin x1, 2 Vrms (full bit), load impedance 47 kΩ
i.LINK (DV IN)	i.LINK 6-pin x1, IEEE1394
Remote control	RS-232C x1, D-sub 9-pin Remote1 x1, stereo mini jack (for connection with the optional SVRM-100A/DSRM-10 controllers) Remote2 x1, stereo mini jack (for connection with the optional FS-20 foot switch) USB 2.0 x1 (Full Speed)
Measurements	
Dimensions	212 x 128.5 x 382mm (8 3/8 x 5 x 15 inches)
Mass	6 kg (13 lb 4 oz)
Power	
Requirements	AC 100 V to 240 V, 50/60 Hz
Consumption	35 W
Operating conditions	
Temperature	+5 to +40°C (41 to 104°F)
Humidity	20 to 80%
Storage/Transporting conditions	
Temperature	-20 to +60°C (-13 to 140°F)



System	
Product specification	2.16 GHz Intel Duo-Core II processor (T7400) 4 GB RAM 750 GB HDD Sony DVD/ CD/ Blu-ray drive 1280 x 1024 resolution 17-inch LCD panel (viewable area, measured diagonally) SAW (Surface Acoustic Wave) touchscreen Intel 945GM video chipset Sony BKBU-8000 Digital Capture Card
Analogue video	RGB or YPbPr or Monochrome S-Video Composite
Digital video	DVI-D up to 1080p/60 SDI, SMPTE 259M up to 720 x 576 pixels (270 Mbps) HD-SDI, SMPTE 292M up to 1920 x 1080 pixels (1.45 Gbps)
Supported formats	NTSC, PAL and SECAM, Component RGB, Component YPbPr, Monochrome, S-Video, DVI-D single link, HD-SDI 1080i, 1280x1024, 1024x768, 800x600, 640x480
Audio	Stereo audio recording with MPEG-1 Layer II encoding at 16 bit/48 kHz resolution
Controls	6 trigger inputs 1 digital output
Measurements	
Dimensions	412 x 380 x 192mm (16.2 x 15 x 7.6 inches)
Mass	13.4 Kg (29.5 lbs)
Physical	
Cabinet	Powder coated stainless steel cabinet
Mounting	VESA 100 mounting
LCD	
Brightness	Minimum 300 cd/m
Contrast ratio	500:1
Resolution	1280 x 1024
Screen	17-inch (viewable area, measured diagonally) SAW (Surface Acoustic Wave) technology touchscreen
Connections	
	1 x BNC female connector for Composite or SDI or HD-SDI 1 x Mini-DIN 4-pin female connector for S-Video 1 x HD-15 female connector for RGB or YPbPr or Monochrome 1 x DVI-I 29-pin female connector for DVI single link (digital only) 1 x Stereo Mini-jack for line level audio 1 x Stereo Mini-jack for line level audio output 1 x Mini-DIN 9-pin female for General Purpose Input (GPI) trigger and digital output 1 x XLR male for power supply 4 x general USB and 1 x printer-only USB 1 x RJ45 10/100/1000 Mbps Ethernet 1 x VGA 15-pin female Output
Power	
Dimensions	208 x 82 x 50mm (8.17 x 3.23 x 1.96 inches)
Mass	0.96 Kg (2.2 lbs)
Input voltage	100-240 VAC 50-/60Hz
Consumption	150 W
Output voltages	19 VDC
Operating conditions	
Temperature	0 to 35° C (32 to 95° F)
Humidity	20 to 80%
Storage/Transporting conditions	
Temperature	-20 to 60°C (-4 to 140°F)
Humidity	10 to 90%
Digital Capture Card (Sony BKBU-8000)	
	Input range: 0.5 Vpp to 1.0 Vpp Offset: -1.0V to 2.0V DC 8 bit gain, 8 bit black level, white balance, phase adjustment 75 Ohm termination AC coupled with DC restoration H and V sync input on RGB and YPbPr only Pixel rate up to 110 MHz Horizontal Frequency: 90 kHz Pixel Jitter: +0.5ns S/N Ratio: 47 dB Linearity: >99% Gain and Offset stability: 1% from 15 to 40°C A/D Conversion: 8 bits each of R, G, B (24 bits/pixel) 24 bits YPbPr Colour Formats: RGB 24, YCbCr 4:2:2, 8 bit monochrome Horizontal anti-aliasing filtering

HD Video Recorder	
HVO-1000MD	
	
Recording devices	
Internal hard disk drive	320 GB
Blu-ray Disc/DVD drive (1)	Compatible media: BD-RE2.0, BD-R1.0, DVD-R
Input connectors	
S-Video in	Mini DIN 4-pin type (x1) Y: 1.0 Vp-p (75 Ω) Sync negative C (BURST): 0.286 Vp-p (75 Ω) (NTSC) C (BURST): 0.3 Vp-p (75 Ω) (PAL)
Video in	BNC (x1), Composite 1.0 Vp-p (75 Ω), Sync negative
DVI-D in	Receptacle (x1), TMDS 1 channel (single link)
RGB in	D-sub 15-pin (x1), 0.7 vp-p/with synce on green G: 1.0 Vp-p 75 Ω
HD-SDI in	BNC (x1) SD: SMPTE259M compliant HD: SMPTE292M compliant 75 Ω
Audio line in	Stereo mini jack (x1) 1.4 Vrms (full bit), input impedance 10 k Ω or higher, unbalanced
Output connectors	
S-Video out	Mini DIN 4-pin type (x1) Y: 1.0 Vp-p (75 Ω) Sync negative C (BURST): 0.286 Vp-p (75 Ω) (NTSC) C (BURST): 0.3 Vp-p (75 Ω) (PAL)
Video out	BNC (x1), Composite, 1.0 Vp-p (75 Ω), Sync negative
DVI-D out	Receptacle (x1), TMDS 1 channel (single link)
HD-SDI out	BNC (x1), SD/HD 0.8 Vp-p 75 Ω
Audio out	Stereo mini jack (x1), 1.4 Vrms (full bit), load impedance 10 k Ω, unbalanced
Other interfaces	
USB	USB 2.0 (x4)
Network	RJ-45 (x1), 1000Base-T/100Base-TX
Remote RS 232C	D-sub 9-pin (x2)
Remote contact switch	Stereo mini jack (x4)
Remote monitor	RJ-45 type (x1)
Other	
Supplied accessories	Before Using this Unit (x1), CD-ROM (Instructions For Use, PROTOCOL MANUAL) (x1), Warranty booklet (x1), Infrared remote control unit (x1)
General	
Power requirements	100V to 240V AC, 50 Hz/60 Hz
Input current	1.9 A to 0.8 A
Operating temperature	5 to 40° C (41 to 104° F)
Operating humidity	20% to 80% (Maximum wet-bulb temperature: 30° C (86° F) (no condensation))
Operating pressure	700 hPa to 1,040 hPa
Temperature range for storage	-20° C to +60° C (-4° F to +140° F)
Humidity range for storage (no condensation)	20% to 90% (maximum wet-bulb temperature: 30° C (86° F)
Storage and transport pressure	700 hPa to 1,040 hPa
Mass	8.4kg (18.5lb.)
Dimensions	305 x 410 x 115.5mm (12 1/8 x 16 1/4 x 4 5/8 in.) including protrusions

LCD Monitor			
LMD-1530MD		LMD-1951MD	LMD-2110MD
			
Panel			
LCD Panel Type	a-Si TFT Active Matrix LCD with anti reflection (AR) coated protection panel		a-Si TFT Active Matrix LCD
Resolution	1280 x 768 pixels (WXGA)	1280 x 1024 pixels (SXGA)	1920 x 1080 pixels (Full HD)
Effective picture size (WxH)	334 x 200mm (13 1/4 x 7 7/8 inches)	376 x 301mm (14 7/8 x 11 7/8 inches)	477 x 268mm (18 7/9 x 10 5/9 inches)
Diagonal	390mm (15 3/8 inches)	481.84mm (19 inches)	547mm (21 5/9 inches)
Aspect	15:9	5:4	16:9
Viewing Angle	176°	178°	170/160°, Typical.
Input			
RGB Component	BNC (x3) RGB: 0.7Vp-p +- 3dB (Sync on Green, 0.3Vp-p sync negative) Component: 0.7Vp-p (75% chrominance standard colour bar signal)		
External Sync	BNC (x1)		
Y/C	4-pinMini DIN x 1 Y:1.0Vp-p +-3dB sync negative C: 0.268Vp-p +- 3dB (NTSC burst signal level), 0.3Vp-p +-3dB (PAL burst signal level) (Line A)		
Composite	BNC (x1) 1.0Vp-p +-3dB, sync negative (NTSC/PAL) (Line A)		
SD/HD - SDI	SD-SDI with adaptor	Yes (x2 with optional board)	Yes, with adaptor
Audio	Phono jack (x1) -5dBu >47KOhms	—	Phono jack (x1) -5dBu >47KOhms
Computer input			
Analogue HD-15	—	D-sub 15-pin (x1), R/G/B: 0.7 Vp-p sync positive (Sync On Green, 0.3 Vp-p sync negative) Sync: TTL level (polarity free, H/V separate sync)	—
HDMI	HDMI input	—	HDMI input
Output			
RGB Component	BNC (x3) loop through with 75Ohms automatic terminal function		
Y/C	4-pinMiniDIN (x1) loop through with 75 Ohms automatic terminal function		
Composite	BNC (x1) loop through with 75 Ohms automatic terminal function		
Audio	built-in speaker 0.5W (x1 Mono), phono jack (x1) loop through with 75Ohms terminal function	—	built-in speaker 0.5W (x1 Mono), phono jack (x1) loop through with 75Ohms terminal function
Computer Output			
DVI-D	—	TMDS single link (x1 with optional board)	
Other			
Remote	Parallel 8pin modular	Parallel 8pin modular Serial RS-232C 9-pinD-sub RJ-45 modular connector (ETHERNET)	AC 100 to 240 V ±10%, 50/60 Hz
Stand	Supplied 100 x 100mm VESA mount	Optional SU-560 100 x 100mm VESA mount	Supplied 100 x 100mm VESA mount
Measurements			
Dimensions W x H x D	372 x 336 x 264mm (14 3/4 x 13 3/8 x 10 1/2 inches)	455.8 x 368.3 x 101.7mm (18 x 14 5/8 x 4 1/8 inches) (without a stand) 455.8 x 435.7 x 302mm (18 x 17 1/4 x 12 inches) (with SU-560 optional stand)	505 x 444 x 119mm (20 x 17 5/8 x 4 3/4 inches)
Mass	6.2Kg	6.7 kg (14 lb 12 oz) 7.1 kg (15 lb 10 oz) (with two BKM-229X installed)	8.6 kg (18 lb 15 oz)
Power			
Requirements	AC 100V - 240V, 50/60Hz	AC 100-240 V, 50/60 Hz, 0.92 A-0.40 A DC IN: 24 V 3.5 A 5 V 0.030 A (Supplied from AC adaptor) AC Adaptor (Sony, AC-110MD) (optional) AC IN: 100 V-240 V, 50/60 Hz, 1.53 A-0.58 A DC OUT: 24 V 5.0 A 5 V 0.060 A	AC 100 V- 240V, 50/60Hz
Consumption	40W	Maximum: approx. 85 W (when two BKM-229X are installed)	100W
Operating conditions			
Temperature	0 to 35°C (32 to 95°F)		
Humidity	30 to 85 % (no condensation)		
Storage conditions			
Temperature	-20 to +60 °C (-4 to +140 °F)		- 10 to + 40°C (14 to 104°F)
Humidity	0 to 90 % (no condensation)		
Pressure	700 to 1060 hPa		







LCD Monitor		
PVM-2551MD	LMD-2451MD	LMD-3250MD
		




Panel			
LCD Panel Type	OLED		α-Si TFT Active Matrix LCD with anti reflection (AR) coated protection panel
Resolution	1920 x 1080 pixels (Full HD)		1920 x 1200 pixels (WUXGA) 1920 x 1080 pixels (Full HD)
Effective picture size (WxH)	543.4 x 305.6mm (21 1/2 x 12 1/8 inches)		518 x 324mm (20 1/2 x 12 7/8 inches) 698 x 393mm (27 1/2 x 15 1/2 inches)
Diagonal	623.4mm (24 5/8 inches)		609mm (24 inches) 802mm (31 5/8 inches)
Aspect	16:9		16:10 16:9
Viewing Angle	89°/89°/89°/89° (typical) (up/down/left/right, contrast > 10:1)		178°
Input			
RGB Component	BNC type (x3), RGB: 0.7 Vp-p ±3 dB (Sync On Green, 0.3 Vp-p sync negative) Component: 0.7 Vp-p ±3 dB (75% chrominance standard colour bar signal)		
External Sync	BNC (x1)		
Y/C	4-pinMini DIN x 1 Y:1.0Vp-p +3dB sync negative C: 0.286Vp-p + 3dB (NTSC burst signal level), 0.3Vp-p +3dB (PAL burst signal level)		
Composite	BNC (x1) 1.0Vp-p +3dB, sync negative (NTSC/PAL)		
SD/HD - SDI	Yes (x2 with optional board)		Yes (HD-SDI Board built in)
Computer input			
Analogue HD-15	D-sub 15-pin (x1) R/G/B: 0.7 Vp-p, sync positive (Sync On Green, 0.3 Vp-p sync negative) Sync: TTL level (polarity free, H/V separate sync) Plug & Play function: corresponds to DDC2B	D-sub 15-pinR/G/B: 0.7Vp-p sync positive (when G channel is sync negative, the internal sync can be used 0.3Vp-p)	
DVI-D	DVI-D (x1), TMDS single link	TMDS single link (x2 with optional board)	TMDS single link
Output			
RGB Component	BNC (x3) loop through with 75Ohms automatic terminal function		
Y/C	Mini-DIN 4-pin (x1), Loop-through, with 75 ohms automatic terminal function		
Composite	BNC (x1) loop through with 75 Ohms automatic terminal function		
Computer Output			
DVI-D	TMDS single link (x1 with optional board)		—
Other			
Remote	Modular connector 8-pin (x1)	Parallel 8pin modular Serial RS-232C 9-pinD-sub serial ETHERNET RJ-45	
Stand	Optional SU-560 100 x 100mm VESA mount	Optional SU32FWS 200 x 400mm VESA mount 100 x 300mm VESA mount	
Measurements			
Dimensions W x H x D	618.4 x 376 x 102.1mm (24 3/8 x 14 7/8 x 4 1/8 inches)	602 x 386 x 110mm (23 3/4 x 15 1/4 x 4 3/8 inches)	783 x 479 x 124mm (30 7/8 x 18 7/8 x 5 inches)
Mass	8.1 kg (17 lb 14 oz)	8.7Kg (with 2 x BKM-229X installed)	13.3Kg (when 2 x BKM-229X installed)
Power			
Requirements	AC 100V - 240V, 50/60Hz DC 24 V/5.0 A, 5 V/0.060 A	AC 100V - 240V, 50/60Hz DC 24V 3.5A; DC 5V 0.03A	AC 100V - 240V, 50/60Hz DC 24V 3.5A; DC 5V 0.06A
Consumption	135W	115W	136W
Operating conditions			
Temperature	0 to 35°C (32 to 95°F)		0 to 35°C (32 to 95°F)
Humidity	30% to 85 % (no condensation)		
Storage conditions			
Temperature	-20 to +60°C (-4 to 140°F)		
Humidity	0 to 90 % (no condensation)		
Pressure	700 to 1060 hPa		

LCD Monitors for General Purpose	
FWD-S47H1	FWD-S42H1
	



Panel		
LCD Panel Type	47"	42"
Resolution	1920 x 1080 pixels, Full HD	
Pixel pitch	0.54 x 0.54mm (1/46 x 1/46 inches)	0.48 x 0.48mm (1/52 x 1/52 inches)
Picture size (H/V)	1,040 x 585mm (41 x 23 1/8 inches)	930 x 523mm (36 3/4 x 20 5/8 inches)
Panel drive	RGB : 8 bit + FRC (Frame Rate Control), colour number : 1.06 billion	
Contrast ratio	1000:1 (typical)	
Brightness	700 cd/m² (typical)	
Viewing angle	178° (typical)	
Response time	9 ms (typical)	
Type	α-Si TFT Active Matrix LCD	
Colour system	NTSC, PAL, PAL-M, PAL-N, NTSC4.43, PAL60	
Sampling rate	13.5 to 162 MHz	
Input / Output		
Network port	RJ45 (x1), 10BASE-T/100BASE-TX	
Audio out	Stereo mini jack (x1), 500 mV rms, high impedance	
S-Video in	Mini DIN 4-pin (x1) Y: 1.0 Vp-p ± 2 dB, sync negative, 75 ohms terminated C: 0.286 (NTSC)/0.3 (PAL) Vp-p ± 2 dB, sync negative, 75 ohms terminated	
Video in/out	BNC (x2), composite video, 1.0 Vp-p ± 2 dB, sync negative, 75 ohms, loop-through (automatic termination)	
HD15 (RGB/COMPONENT)		
Video in/out	D-sub 15-pin (female, x2)	
Audio in	Stereo mini jack (x1), 500 mV rms, high impedance	
DVI		
DVI in	DVI (x1), DVI Specification Rev. 1.0 compliant/HDMI (available by using a DVI-to-HDMI cable)	
Audio in	Stereo mini jack (x1), 500 mV rms, high impedance	
Speaker		
Speaker out (L/R)	Grip connector (x4), 7W + 7W, 6 ohms	
Measurements		
Dimensions	1082 x 627 x 129mm (42 5/8 x 24 3/4 x 5 1/8 inches)	973 x 566 x 125mm (38 3/8 x 22 3/8 x 5 inches)
Mass	Approx. 30.5 Kg (67 lb 2 oz)	Approx. 25.5 Kg (56 lb 2 oz)
Power		
Requirements	AC 100 to 240 V, 50/60 Hz, 2.9 A (maximum)	
Consumption	240 W (typical) / 320 (maximum)	
Operating conditions		
Temperature	0 to 35 °C (32 to 95 °F)	
Storage/Transporting conditions		
Temperature	-10 to 40 °C (14 to 104 °F)	
Humidity	20 to 90%, no condensation	







		3D LCD Monitors	
		LMD-2451MT	LMD-4251TD
			
Panel			
LCD Panel Type	24"		42"
Resolution	1920 x 1200 pixels (WUXGA)		1920 x 1080 pixels, Full HD
Picture size (H/V)	518.4 x 324.0mm (20 1/2 x 12 7/8 inches)		930 x 523mm (36 3/4 x 20 3/4 inches)
Aspect	16:10		16:9
Viewing angle (3D)	50° at a viewing distance more than 300mm, crosstalk less than 7% (typical)		40° at a viewing distance more than 600mm, crosstalk less than 7% (typical)
Viewing angle (2D)	89°/89°/89°/89° (typical) (up/down/left/right contrast > 10:1)		
Colours	Approx. 16.7 million colours		
Type	Type α-Si TFT Active Matrix LCD with an AR-coated protection panel		α-Si TFT Active Matrix LCD
Input			
Composite	BNC (x1), 1.0 Vp-p ±3dB sync negative		
Y/C	Mini DIN 4-pin (x1) Y: 1.0 Vp-p ±3dB sync negative, C: 0.286 Vp-p ±3dB (NTSC burst signal level), 0.3 Vp-p ±3dB (PAL burst signal level)		
RGB, Component	BNC (x3) RGB: 0.7 Vp-p ±3dB (Sync On Green, 0.3 Vp-p sync negative) Component: 0.7 Vp-p ±3dB (75% chrominance standard colour bar signal)		
DVI-D	DVI-D (x1) TMDS single link		
HD15	D-sub 15-pin (x1) R/G/B: 0.7 Vp-p sync positive (Sync On Green, 0.3 Vp-p sync negative) Sync: Total level (polarity free, H/V separate sync) Plug & Play function: corresponds to DDC2B		
External Sync	BNC (x1) 0.3 Vp-p to 4.0 Vp-p ± bipolarity ternary or negative polarity binary		
Option slot	2 slots		
Parallel remote	Modular connector 8-pin (x1) (Pin-assignable)		
Serial remote	D-sub 9-pin (RS-232C) (x1), RJ-45 modular connector (Ethernet) (x1) (10BASE-T/100BASE-TX)		
Output			
Composite	BNC (x1), Loop-through, with 75 ohms automatic termination		
Y/C	Mini DIN 4-pin (x1), Loop-through, with 75 ohms automatic termination		
RGB, Component	BNC (x3), Loop-through, with 75 ohms automatic termination		
External sync	BNC (x1), Loop-through, with 75 ohms automatic termination		
Audio monitor out	-	Phono jack (x2) (L, R)	
Speaker (Built-in)	-	1.0 W + 1.0 W (stereo)	
Measurements			
Dimensions	602.4 x 386.2 x 110mm (23 3/4 x 15 1/4 x 4 3/8 inches) (including projections)		1027 x 616 x 130mm (40 1/2 x 24 3/8 x 5 1/8 inches)
Mass (with options)	8.8 kg (19 lb 6.4 oz) (with 2 x BKM-250TG)		23.5 kg (51 lb 13 oz) (with 2 x BKM-229X)
Power			
Requirements	AC IN: 100 V to 240 V, 50/60 Hz, 1.53 A to 0.58 A		AC 100 V to 240 V, 50/60 Hz, 2.3 A to 1.1 A
Consumption	Maximum: approx. 136 W (with 2 x BKM-229X)		Maximum: approx. 230 W (with 2 x BKM-229X)
Operating conditions			
Temperature	0°C to 35°C (32°F to 95°F) Recommended: 20°C to 30°C (68°F to 86°F)		
Humidity	30% to 85% (no condensation)		
Storage/Transporting conditions			
Temperature	-20°C to +60°C (-4°F to +140°F)		
Humidity	0% to 90% (no condensation)		
Pressure	700 hPa to 1060 hPa		



	Digital Colour Printer	Colour Video Printer	Digital Colour Printer
	UP-25MD	UP-D25MD	UP-DR80MD
			
System			
Printing system	Dye sublimation thermal transfer		Dye sublimation printing
Resolution	Approx. 423 dpi		Approx. 301 dpi
Gradations	8bit (256 levels) processing each for Yellow, Magenta, Cyan		
Picture elements	UP-21L/24LA: 2,100 x 1,600 dots UP-21S/24SA: 1,600 x 1,200 dots	UP-21L/24LA: 2,132 x 1,600 dots UP-21S/24SA: 1,600 x 1,260 dots	A4 size: UPC-R80MD: 3508 x 2470 dots
Picture area	UP-21L/24LA: 126.0 x 96.0mm (5 x 3 3/4 inches) UP-21S/24SA: 96.0 x 72.0mm (3 3/4 x 2 7/8 inches)	UP-21L/24LA: 127.9 x 96.0mm (5 1/8 x 3 3/4 inches) UP-21S/24SA: 96.0 x 75.6mm (3 3/4 x 3 inches)	A4 size: 202 x 287mm
Tray capacity	S Size tray: Max. 80 sheets L Size tray: Max 50 sheets		50 sheets
Printing time	L size: max. 50 sheets S size: max. 80 sheets		A4 size: Approx. 76 seconds
Inputs/outputs	Video, S-Video, RGB, SYNC, HDTV IN/OUT signals 1080i/59.94i, 1080/50i (2:1 interlace) 720/59.94p, 720/50p (progressive)	Hi-Speed USB (USB 2.0)	
Measurements			
Dimensions	212 (W) x 98 (H) x 398 (D)mm, (8 3/8 x 3 7/8 x 15 5/8 inches)		Approx. 317(W) x 207(H) x 425(D)mm (12 1/2 (W) x 8 1/8 (H) x 16 3/4 (D) inches)
Mass	5.5 kg (12 lb 2 oz)	5.7 kg (12 lb 6 oz)	Approx. 11.5 kg (25.3 lbs)
Power			
Requirements	AC 100 V to 240 V, 50/60Hz		
Consumption	1.7 A to 1.0 A		100 to 120 V: Max.2.8 A / 220 to 240 V: Max.1.2 A
Operating conditions			
Temperature	5 °C to 35 °C (41 °F to 95 °F)		5 °C to 35 °C (41 °F to 95 °F)
Humidity	20% to 80% (non condensing)		
Storage/Transporting conditions			
Temperature	-20 °C to 60 °C (-4 °F to 140 °F)		
Humidity	20% to 80% (non condensing)		
Other			
Supplied accessories	CD-ROM (1) (Printer Driver, Operating Instructions (PDF) 21 Languages). Before Using this Printer (1) (21 Languages), Paper Tray (1), Stopper (1), Cleaning Cartridge (1)	CD-ROM (1) (Operating Instructions (PDF) 21 Languages), Before Using this Printer (1) (21 Languages), Paper Tray (1), Stopper (1), Cleaning Cartridge (1), USB Cable (1)	Power Cable (1), USB cable (1), CD ROM (1), Paper holder (2), Cleaning ribbon (1), Before using ths printer (1), Software license agreement






		Colour Video Printer	Digital Colour Printer
		UP-55MD	UP-D55
			
System			
Printing system	Dye sublimation printing		
Resolution	Approx. 379 dpi		
Gradations	8 bits (256 levels) processing each for Yellow, Magenta and Cyan		
Picture elements	2528 x 1920 pixels (full screen print)		
Throughput	Approx. 20 seconds		
Tray capacity	Max. 100 sheets		
Memory	8 frame memories		18 MB (two frame memories)
Control terminal	Remote 1 (special mini) for optional RM-5500 (discontinued) Remote 2 (stereo mini) for optional RM-91 RS-232C interface port (D-sub 25-pin) for external computer		
Inputs/outputs	Video, S-Video, RGB, SYNC		Hi-Speed USB (USB 2.0)
Measurements			
Media size	A5 Size: 178 x 152mm (7 1/8 x 6 inches)		
Dimensions	Approx. 280 x 125 x 398mm (11 1/8 x 5 x 15 3/4 inches) excluding the projection parts		
Mass	Approx. 9 kg (19 lb 13 oz)		
Power			
Requirements	AC 100 to 120 V, 50/60 Hz, AC 220 to 240 V, 50/60 Hz		
Consumption	100 to 120 V: Max.2.8 A / 220 to 240 V: Max.1.2 A		
Operating conditions			
Temperature	5 °C to 35 °C (41 °F to 95 °F)		
Humidity	20% to 80% (non condensing)		
Storage/Transporting conditions			
Temperature	-20 °C to 60 °C (-4 °F to 140 °F)		
Humidity	20% to 90% (non condensing)		

Dual Interface Black & White Printer	
UP-970AD	
UP-990AD	
	
	
System	
Printing system	Direct thermal printing
Resolution	325 dpi
Gradations	8-bit (256 levels) processing
Picture elements	Digital: 3414 x 2560 pixels EIA: 1280 x 508 pixels CCIR: 1280 x 612 pixels
Throughput	Approx. 8 seconds / image (in standard mode)
Tray capacity	25m (UPP-210HD and UPP-210SE)
Memory	Digital mode: 3414 x 2560 pixels max. Analogue mode: 6 frames (800 k x 8 bits per frame)
Inputs/outputs	Digital: Hi-Speed USB (USB 2.0), Analogue: Input connector: VIDEO IN (BNC type) EIA or CCIR composite video signals 1.0 Vp-p, 75 ohms/high-impedance (EIA/CCIR automatically discriminated), Output connector: VIDEO OUT (BNC type), EIA or CCIR composite video signals 0 Vp-p, 75 ohm loop-through/EE switchable, REMOTE connector: stereo mini jack
Measurements	
Media Size	Paper width of 210mm
Print size	When "S:STD" is selected from "SIDE" EIA: 187 x 140mm CCIR: 187 x 138mm When "S:SIDE" is selected from "SIDE" EIA: 249 x 188mm CCIR: 249 x 186mm
Dimensions	316 x 132.5 x 305mm (12 1/2 x 5 1/4 x 12 1/8 inches)
Mass	Approx. 8 kg (17 lb 10 oz)
Power	
Requirements	AC 100 to 240 V, 50/60 Hz
Consumption	2.4 A to 1.3 A
Operating conditions	
Temperature	5 °C to 35 °C (41 °F to 95 °F)
Humidity	20% to 80%
Storage/Transporting conditions	
Temperature	-20 °C to 60 °C (-4 °F to 140 °F)
Humidity	20% to 80%

	Black & White Video Printer		Digital Black & White Printer	
	UP-897MD		UP-D897	
				
System				
Printing system	Direct thermal printing			
Resolution	325 dpi			
Gradations	8-bit (256 levels) processing			
Picture elements	(when "SC:WD1" is selected from "SCAN") EIA: 1210 x 490 pixels CCIR: 1210 x 582 pixels	4096 x 1280 pixels (max.)		
Throughput	When "SP:HI" is selected from "SPEED" Approx. 2 seconds / image (at standard setting) When "SP:NOR" is selected from "SPEED" Approx. 3.3 seconds / image (at standard setting)	High-speed mode Approx. 2 seconds / image (960 x 1280 pixels) Normal speed Approx. 3.3 seconds / image (960 x 1280 pixels)		
Memory	10 frames (800 k x 8 bits per frame)		4096 x 1280 x 8 bit (one image at full resolution)	
Inputs/outputs	Input connector: VIDEO IN (BNC type) EIA or CCIR composite video signals 1.0 Vp-p, 75 ohms/high-impedance (EIA/CCIR automatically discriminated) Output connector: VIDEO OUT (BNC type) EIA or CCIR composite video signals 1.0 Vp-p, 75 ohm loop-through/EE switchable REMOTE connector: stereo mini jack		Hi-Speed USB (USB 2.0)	
Measurements				
Media Size	Paper width of 110mm			
Print size	(when "SC:WD1" or "SC:NOR" is selected from "SCAN") When "S:STD" is selected from "SIDE" EIA: 94 x 73mm CCIR: 94 x 71mm When "S:SIDE" is selected from "SIDE" EIA: 124 x 96mm CCIR: 127 x 96mm	320 x 100mm (max.) (12 5/8 x 4 inches)		
Dimensions	154 x 88 x 240mm (6 1/6 x 3 1/2 x 9 1/2 inches)			
Mass	Approx. 2.6 kg (5 lb 11 oz)			
Power				
Requirements	AC 100 to 240 V, 50/60 Hz			
Consumption	1.5 A to 0.8 A			
Operating conditions				
Temperature	5 °C to 35 °C (41 °F to 95 °F)			
Humidity	20% to 80%			
Storage/Transporting conditions				
Temperature	-20 °C to 60 °C (-4 °F to 140 °F)			
Humidity	20% to 90%			

	Multi-media Digital Black & White Printer		Multi-media Dual Interface Digital Imager	
	UP-D72XR		UP-D74XRD	
				
System				
Printing system	Direct Thermal Printing			
Resolution	300 dpi			
Gradations	512 grey levels (9 bit)			
Picture elements	2743 x 2320 pixels			
Throughput	Approx. 40 seconds			
Film supply tray	1 tray			
Tray capacity	Paper: 100 sheets / Film: 100 sheets			
Memory	16 MB			
Inputs/Outputs	USB connector x 1	DICOM port x 1 (RJ-45 modular jack) USB 2.0 connector x 1		
Measurements				
Print size	232.2 x 196.4mm (9 1/4 x 7 3/4 inches)			
Dimensions	412 x 210 x 431mm (16 1/4 x 8 3/8 x 17 inches)			
Mass	Approx. 15.5 kg (34 lb 3 oz)	Approx. 16kg (35 lb 3 oz)		
Power				
Requirements	AC 100 to 240 V, 50/60 Hz			
Consumption	Standby: 12.6 W (actual measurement) Black printing: 190 W (actual measurement) Max: 270 W			
Operating conditions				
Temperature	10 °C to 30 °C (50 °F to 86 °F)			
Humidity	20% to 80% (non-condensing)			
Storage/Transporting conditions				
Temperature	-20 °C to 60 °C (-4 °F to 140 °F)			
Humidity	20% to 90% (non-condensing)			

		Diagnostic Film Imagers	
		UP-DF550	UP-DF750
			
System			
Printing system	Direct Thermal Printing		
Resolution	320dpi	604 dpi	
Gradations	12 BIT PROCESSING	14 bit processing	
Picture elements	5232 x 4360 pixels (for 14 x 17 inch film)		
Throughput	Approx. 64 sheets (per hour for 14 x 17 inch film) Approx. 85 sheets (per hour for 8 x 10 inch film)	8,256 x 9,888 pixels (for 14 x 17 inch film) Approx. 75 prints (per hour for 14 x 17 inch film) Approx. 90 prints (per hour for 8 x 10 inch film)	
Film supply tray	Two trays		
Tray capacity	125 sheets (max.)		
Maximum density	UPT-517BL, UPT514BL, UPT-512BL, UPT-510BL: 3.2		UPT-M710BL, UPT-M712BL: 3.8 UPT-517BL, UPT514BL, UPT-512BL, UPT-510BL: 3.2
Inputs/outputs	DICOM port x 1 (RJ-45 Modular jack)		
Measurements			
Media size	354 x 430mm (14 x 17 inches), 279 x 354mm (11x 14 inches), 253 x 304mm (10 x 12 inches), 202 x 253mm (8 x 10 inches)		
Dimensions	600 x 316 x 686mm (23 5/8 x 12 1/2 x 27 1/8 inches)		
Mass	Approx. 63 kg (138 lb 14 oz)		Approx. 67 kg (147 lb 11 oz)
Power			
Requirements	AC 100 to 240 V, 50/60 Hz		AC 100-120 V/ AC 200-240 V, 50/60 Hz
Consumption	4.4 to 1.8 A		4.4 to 2.4 A
Operating conditions			
Temperature	10 °C to 30 °C (50 °F to 86 °F)		
Humidity	20% to 80% (non-condensing)		
Storage/Transporting conditions			
Temperature	-20 °C to 60 °C (-4 °F to 140 °F)		
Humidity	20% to 80% (non-condensing)		

DICOM Colour Printer	
UP-D77MD	
	
System	
Printing system	Dye transfer sublimation thermal printing
Resolution	300dpi
Gradations	over 16.7 million colours
Picture elements	3,208 x 2,400 dots
Throughput	Approx. 85 seconds (A4)
Paper supply tray	1 tray
Tray capacity	72 sheets (max.)
Inputs/outputs	DICOM port x 1 (RJ-45 modular jack)
Measurements	
Media size	A4: 210 x 297mm
Dimensions	Approx. 493.8 (W) x 176 (H) x 468.8 (D)mm / (19 1/2 (W) x 7 (H) x 18 1/2 (D) inches)
Mass	Approx. 21kg (46 lb 5 oz)
Power	
Requirements	AC 100-240 V, 50/60 Hz
Consumption	3.0 to 1.3 A
Operating conditions	
Temperature	10°C to 30°C (50°F to 86°F)
Humidity	20% to 80% (non-condensing)
Storage/Transporting conditions	
Temperature	-20 °C to 60 °C
Humidity	20% to 90% (non condensing)





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